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HISTORY OF ART IN ANTIQUITY

Volume IX

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By

GEORGES PERROT

Member of the Institute: Professor at Faculty of Letters,
Paris: Director of the Superior Normal School

And

CHARLES CHIPIEZ

Architect of the Government

Volume IX

Archaic Greece.

Glyptics. Numismatics

Painting. Ceramics

Containing 22 plates and 367 engravings

PARIS

1911

Translated by N. Clifford Ricker. D. Arch.
Emeritus Professor of Architecture

UNIVERSITY OF ILLINOIS

Urbana. Ill.

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Book XIII. Archaic Greece.

Chapter XIV. Glyptics.

1. Renaissance of Glyptics in the 7 th Century.

Between the end of the Mycenaean period and the first Olympiads, during the entire duration of what has sometimes been called the middle ages of Greece, so to speak there is no sculpture.[1] While the so-called geometrical style reigns, whatever the iamge thathe creates, the artist only employs straight lines variously combined and clearly defined curves. When he undertakes to reproduce the figures of men and animals, he reduces them to purely schematic traces, whose elements are rectangles, trapezoids, triangles and circles.[2] These tendencies and habits of the hand he carries everywhere, that he fashions statuettes of stone, bronze and terra cotta, or he paints personages on the bodies of his vases of clay. The example that he offers thus can only form a law for the workman, that accepts the task of decorating by engraving the very limited field of the pendant of a necklace or of the bezel of a ring of metal.

Note 1. Histoire de l'Art. Vol. VII. p. 104-153.

Note 2.p.G. The same. Vol. VII, p.172, VIII. p. 420-424.

If very early in Chaldea as in Egypt and later in Mycenaean Greece, men undertook to incise very hard stones known by the name of gems, this was particularly to engrave theirimages, that allowed these to be employed as seals. When the seal is presed on damp clay or wax, there is an image in relief, and it was understood at first, that it must be impressed on the material with which it is placed in contact by the fingers that held it. This projecting image will have a distinctness to which the inverse image cannot pretend, whose outlines will be lost in the shadows of the hollows modeled in it. Then for long centuries, there were scarcely made only sunken engravings or intaglios. Now what is an intaglio if not a reversed relief, a relief in which the form of the object represented, instead of projecting externally, penetrates and is sunk in

the material serving it as support? In these conditions, the task is more difficult to execute than where it presents itself materially. Contemporaneous with the vases of the Dipylon and the crude figurines that have been found in the most ancient layers of the soil of the hills at Olympia, the engraver in the 9 th and 8 th centuries could only attempt in vain to engrave in the thickness of an agate or a carnelian some one of those images of man or of a wild beast, that on certain individual intaglios of the preceding age sometimes have such a broad design and such a beautiful movement.[1] Neither the painter nor the sculptor could furnish him with models suited to guide his eye and his hand in the delicate task of transposition. In Greece the sculptor had then lost even the idea of the wise and complex artifice of the relief; he did not even suspect its secrets, those that the [illegible] artist by a sort of intuition and often applied with a rare good fortune. All that one could then expect from the effort of the engraver was, that he should reproduce some one of the types and motives, [illegible] then most frequently found in the [illegible] as well as in the ornamentation of vases, furniture and jewels.

Note 1.p.3. Histoire de l'Art. Vol. VI. Plate [illegible].

Such indeed is the character of the intaglios, also in very small number, which can be attributed to this epoch. Of these intaglios of very poor and very dry execution, we have given but a single [illegible] example.[1] Perhaps it would not appear [illegible] to [illegible] more clear examples. Later are then found in works, more interesting by the variety of their themes and by the merits of their execution, than glyptics commenced to produce in the 7 th century, and which it multiplied in the 6 th. Then will be better measured the course passed over and the progress realized.

Note 1.p.3. Histoire de l'Art. Vol. VII, vignette on p. 153. Also see vol. VI, p. 859-860; Figs. 426, 1, 2, 3, 4; Figs. 431, [illegible] insufficiently informed, we have reproduced as belonging to the [illegible] those which appear to us to date rather from the succeeding period.

Note 2.p.3. Our chief guide in this study will be Furtwängler, and we shall make numerous extracts from the great work published by him under the title: Die antiken Gemmen, Geschichte der Steinschneidekunst im klassischen Altertum.(Vol.I), [illegible]

the material serving it as support? In these conditions, the image is more difficult to execute than where it presents itself naturally. Contemporaneous with the vases of the Dipylon and the crude figurines that have been found in the most ancient layers of the soil of the Altis at Olympia, the engraver in the 9 th and 8 th centuries could only attempt to seek to engrave in the thickness of an agate or a cornelian some one of those images of man or of a wild beast, that on certain lenticular intaglios of the preceding age sometimes have such a broad design and such a beautiful movement.[1] Neither the painter nor the sculptor could furnish him with models suited to guide his eye and his tool in the delicate work of transposition. In Greece the sculptor had then lost even the idea of the wise and complex artifice of the relief; he did not even suspect the methods, those that the Mycenaean artist by a sort of intuition had often applied with a rare good fortune. All that one could then expect from the effort of the engraver was, that he should reproduce some one of the types and motives, t then most frequently found in the votive statuettes as well as in the ornamentation of vases, furniture and jewels.

Note 1.p.2. Histoire de l'Art. Vol. VI. Plate XVI.

Such indeed is the character of the intaglios, also in very small number, which can be attributed to this epoch. Of those intaglios of very poor and very dry execution, we have given but a single unique specimen.[1] Perhaps it would not appear improper to present some other examples . Those are then found in works, more interesting by the variety of their themes and by the merits of their execution, than glyptics commenced to produce in the 7 th century, and which it multiplied in the 6 th. Thus will be better measured the course passed over and the progress realized.

Note 1.p.3. Histoire de l'Art. Vol. VII, vignette on p. 153. Also see vol. VI, p. 859-860; Figs. 426, 1, 2, 3, 4; Figs. 434, 15, 14, 16. Still insufficiently informed, we have reproduced as belonging to the Mycenaean age some stones, that now appear to us to date rather from the succeeding period.

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[illegible] Tab. II, [illegible] and [illegible]. [illegible] figures [illegible] from drawings. Tab. III. [illegible] in text [illegible] or [illegible]). The author [illegible] first [illegible] the [illegible], and that on account of the difficulty [illegible] in [illegible], were [illegible] inaccessible to workers. The work cost 15 years of labor. To undertake it was first necessary to collect impressions taken from all the great public collections; from this [illegible] Furtwängler chose as best preserved the most interesting by execution or [illegible], the [illegible] pieces reproduced in [illegible] plates and text; but [illegible] especially appears the mastery of the archaeologist is in the history, in the divisions that he has established, in the definitions given of each style and of each epoch and each school, in the comparisons [illegible] between the monuments of [illegible] and those of contemporary sculpture and painting. [illegible] could criticise certain details, and add as discovered other examples to those cited there; but the new monuments will have to be inserted in the lists arranged by Furtwängler. While most frequently [illegible] ourselves in [illegible] the ideas stated in the work in question, we shall attempt elsewhere than in his plates of [illegible], that [illegible] justify our descriptions, and to place under the eyes of the reader unpublished pieces. M. Furtwängler has but very discreetly drawn from the treasures of the cabinet of Paris. Its resources have been placed at our disposal with earnest liberality by the learned man to whom it is entrusted, my dear colleague, M. Ernest Babelon.

In the decoration of these seals , that are mostly cones or fragments of cones, there is nothing [illegible] presented to our eyes [illegible] the monuments that we have assigned to this period. Here, as on the [illegible] and on the most ancient products of the ceramics [illegible] in the pottery of the Cyprian, it is a purely linear design with straight lines intersecting [illegible] in different ways or circles that surround a point placed at their centre. (Fig. 1). Elsewhere these are animals, especially [illegible] or [illegible] (Pl. I, cylinder), of which the forms are [illegible] as on the oldest [illegible] of Cyprus. Finally, elsewhere, these [illegible] have suffered the same transformation (Pl. II, 5). Nowhere is it carried farther than on a square seal of [illegible] from [illegible], which is engraved on three faces. Face I, a [illegible] standing that holds in one hand a zigzag or serpent.

in heliogravure. Vol. II, explanations and plates. Some figures in text from drawings. Vol. III. History with figures in text in facsimile or from drawings). The author has first classified the materials scattered everywhere, and that on account of the difficulty experienced in consulting them, were almost inaccessible to workers. The work cost 15 years of labor. To undertake it was first necessary to collect impressions taken from all the great public collections, from this matter Furstwängler chose as best preserved the most interesting by execution or theme, the 3600 pieces reproduced in his plates and text; but where especially appears the mastery of the archaeologist is in the history, in the divisions that he has established, in the definitions given of each style and of each epoch and each school, in the comparisons instituted between themonuments of glyptics and those of contemporary sculpture and painting.One could criticize certain details, and add as discovered other examples to those cited there; byt the new monuments will have to be inserted in the lists arranged by Furtwängler. While most frequently limiting ourselves to summarizing the ideas stated in the work in question, we shall attempt elsewhere than in his plates of intaglios, that will justify our assertions, and to place under the eyes of the reader unpublished pieces. M. Furtwängler has but very discreetly drawn from the treasures of t the cabinet of Paris. Its resources have been placed at our d disposal with earnest liberality by the learned man to whom it is entrusted, my dear colleague, M. Ernest Babelon.

In the decoration of these seals , that are mostly cones or frustums of cones, there is nothing not already presented to our eyes in the monuments that we have assigned to this period. Here, as on the fusaioles and on the most ancient products of the ceramics that ended in the pottery of the Dipylon, it is a purely linear design with straight lines intersecting at in different ways or circles that ornament a point placed at their centre. (Fig. 1). Elsewhere these are animals, especially horses or ibexes (Pl. 2, cylinder), on which the forms are contracted as on the oldest bronzes of Olympia. Finally,elsewhere, human bodies have suffered the same transformation (Pl. II,8). Nowhere is it carried farther than on a square seal of steatite from Cnossos, which is engraved on three faces. Face I, a personage standing that holds in one hand a zigzag or serpent.

(Pl. II, 9). Face II; a person that draws a bow against a centaur armed with two branches of a tree, in front is a frog; b below the centaur are signs difficult to define (Pl. I, 1). Face III; the labyrinth (Pl. II, 20).[2] A last trait by which is accented the relationship, that connects these intaglios either to the vases or to the brooches,[3] that seem to us to date from the age in which there made itself felt in all continental Greece, the influence of a system of decoration originated in central Europe, is what we term the fear of the void.[4] Observe all those objects of badly defined character that fill the field between the two men and all around them on the great stone of Melos (Fig. 2).

Note 1.p.4. Histoire de l'Art. Vol. VIII. Figs. 198-203.

Note 2.p.4. Compare the representation of Pl. I, 1, with that found on a band of gold published by Collignon, Histoire de la Sculpture Grecque, Vol. I, Fig. 41, and that of the labyrinth on the Coins of Cnossos.

Note 3.p.4. Histoire de l'Art. Vol. VII, figs. 118-132.

Note 4.p.4. The same. p. 168, 184, 195.

It must be in the second half of the 8 th century that art commenced to reascend the slope which it had descended after the Dorian invasion. It was among the Ionians as proved by their sculpture, that first manifested itself the sentiment of nature and the desire for attaining beauty by the expression of life. The Ionians belonged to the oldest stock of the Greek race. Perhaps they were established in the valleys of the Hermos, Cayster and Meander from the time when the Achaian kings reigned at Mycenae, Sparta and Cnossos. If later those protoionians were rejoined and reinforced in Asia Minor by other groups of the same race, that fled before the Dorians, those emigrants had escaped prolonged contact with the half barbaric peoples, that hal planted in European Greece the geometrical style with its monotony and its strange dryness. In that Asian Greece not overthrown by the invasion, Mycenaean art before expiring could leave to the workmen with a rich repertory of varied motives, an entire heritage of procedures and of manual tricks, that otherwise must have been lost because of the desertion of its workshops.

The Ionians had yet another advantage over the western Greeks; they were nearer the Orient, more within reach of the old civ-

civilizations of Chaldea and of Egypt whose arts offered them suggestive models, a number of forms which they could employ for translating the ideas personal to themselves. By the routes of caravans that traversed Taurus and the plateaus of Asia Minor, they received the products sent from the valley of the Euphrates. As for Egypt, the Ionians had reached it before the end of the 8 th century and in the first half of the 7 th. By the services rendered by them to Psammetichus, they had taken root in the Delta. They were at home in Naucratis. They frequented Sais and Memphis. In these conditions Oriental art could not fail to exert a very evident influence on archaic Greek art and the monuments of glyptics, in spite of the small space that their smallness could give to the caprices of ornamentation, they bear the very distinct mark of this action of exotic types.

The first efforts of reviving glyptics are represented by nothing better than a group of intaglios found in the island of Melos.[1] They were taken from a cemetery from which came several painted vases, whose discovery made an event in archaeology.[2] What characterizes these vases is, that the painter took the subjects of his paintings from Ionian mythology, while in the ornamentation [illegible] these paintings are very visible reminiscences of both Mycenaean and of geometrical decoration. The Melians of the 5 th century, as known through Thucydides, boldly claimed a Spartan origin, and during the war on the Peloponnesus, they were attached to the group of Dorian States, that made a campaign against Athens and the Ionian cities, its allies or subjects;[3] but if Sparta had formerly furnished the chief of the expedition that went after the 11 th century as asserted, to colonize [illegible], Melos and the east of Greece, this mode of existence was very short. With some Spartans, it comprised Cretans and Phoenicians, i.e., elements that like the Ionians belonged to the most ancient strata of the Greek people.[1] During several centuries, until the moment when after the foundation of the maritime empire of Athens, the Greek cities divided into two hostile leagues; and in Asian Greece and in the adjacent islands, one did not hear of a race rivalry, that manifested itself by mutual hostility. Even where as in the south of Caria, as at Cnidus and Rhodes, the Dorian element was predominant, the supremacy of Ionian genius was accepted everywhere without resistance. From Cyprus and Rhodes, Crete and Lesbos,

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sculpture reproduced the types created by the Ionian sculptors.[2] At Rhodes in the cemetery of Camisos have been found a number of painted vases; now we shall see that nearly all depend on Ionian ceramics. Further, it was not alone in the domain of art that was thus imposed the prestige and ascendant of Ionia. The poetical dialect to which the Homerides of Chios had given its final form, had become forever that of the epic period. When prose was born, the historians, philosophers, and learned men, whatever their country, during the century only made use of t the language whose first models were given by the logographers and sages of Ionia. The Ionian dialect was adopted by Herodotus and Hippocrates of Cos, both born in Dorian lands.

Note 1.p.6. Conon. Narration XXVI. Herodotus. IV. 147. Plutarch. Virtues of Women. VIII.

Note 2.p.-. Histoire de l'Art. Vol. VIII. Chap. X.

In these conditions, we have the right to carry to the account of Ionian art the intaglios of Melos. The first observation that they suggest is that these evidence that survival of the traditions of primitive Greece, that is one of the characteristics of Ionian civilization. The form that dominates in the r rare seals of the geometrical style, that have come to us is that of a cone more or less truncate. It is entirely otherwise with the intaglios of Melos. They assume the forms that were in fashion in the Mycenaean age, the lenticular and that of the acorn or olive. On the contrary, the workman seems to have lost much in skill of hand. He no longer dares to take hard stones of a more or less milky tone, that the engraver attacked so b boldly formerly. He restricts himself to softer and opaque stones, such as steatite and hematite. This is because he had forgotten the use of the wheel, that seems to have been known to the artist of Mycenae and of Cnossos.[1] To marke the chief points of the figure, he employed the bow drill, moved by the aid of a bow. By an intaglio that represents a lion between t two birds (Pl. I, 4), one sees what sort of work he obtained thus. By a series of globules, he models the projections of t the forms represented.[2] To finish the design, the engraver uses saws, points and chisels; but even on the most careful of these intaglios, the work always remains summary, a little dry and hard.

Note 1.p.7. It has seemed to us difficult to admit, that them

the middle of the second millenium before our era, the Mycenaean workmen had already used the wheel (Histoire de l'Art, Vol. VI, p.861-862); but Furtwängler remarks that this tool was then in use in western Asia, and that to fashion their vases, the ceramists at Mycenae and in other industrial centres of that civilization employed the potter's wheel. The principle of the latter was then known to them. Furtwängler has very closely studied Mycenaean glyptics in the most authentic examples; he believes that he recognizes in the modeling of the image on the most careful intaglios, the certain trace of the use of the wheel. (die antike Gemmen, p. 29-30). We can only bow before his authority.

Note 2.p.7. J. deYsoville, who first published this scarab, believes that it came to us in the state of a simple sketch, (Etudes numismatique et de glyptique, in Revue numismatique, 1905. p. 277).

If the execution is far from having there the same merit as on the most beautiful Mycenaean intaglios, the repertory no longer offers the same variety. The same types are repeated to satiety, almost always fixed and as if stiffened in the same poses. What dominates are the animals, such as the ibex (Fig. 3), lion, stag, wild boar (Fig. 4), then aquatic birds, like the swan, gull and crane (Fig. 5). An ibis seems to occupy the field of a scarab of cornelian (Pl. II, 1). Elsewhere are the lizard or fishes.

Besides these types taken from nature, one finds composites of ibexes, horses and of winged lions.[3] Here are seen to reappear those already traditional types of the sphynx and the griffin. A novel type is that of the chimera (Fig. 6). It has been asked whether this was not born of the confusion resulting from some Mycenaean intaglio, where behind a lion was represented an ibex or a goat. Seeing the horned head rise over the back of the wild beast, it might have been supposed to belong to that, and that the engraver had desired to represent a monster combining in its person the attributes of two different species.[1] If it be true that the Ionians had under their eyes longer than the other Hellenes many strays from the art of primitive Greeks, the conjecture has nothing improbable.

Note 3.p.7. Furtwängler. Pl. V. 9-13, 21.

Note 1.p.8. Milchhöfer. Anfänge der griechischen Kunst,p.81.

[illegible] scenery): - marine scenes that present very diverse appearances. There is a serpent with a body terminated by a tail provided with fins. There are goats with winged horses with the rear body of a fish. Elsewhere the body of a sea [illegible] in the same fashion.

These fantastic animals had been multiplied by Mycenaean art; but here we are at first warned that these are adopted by one part in the repertory of the engravers of Melos. These themes derived from myths that had been made popular. Here is Hercules, the conqueror of monsters. Archaic art delights in bringing him to the scene. He appears here in combat with the [illegible], bearded and bent with quiver on his back. His body is divided in horizontal zones and falls to his legs (Fig. 7).[1] The centaur had already made his appearance on the monuments of the geometrical style, but here (Fig. 8) the two natures combined in him are much more harmoniously united than in the image presented by the painted vase of the Dipylon, and by the stamped band of gold on which we have mentioned its presence.[3] Prometheus is recognized in a personage crouching on the ground with hands bound behind his back; on him pounces the eagle, that will pierce his side with its beak (Fig. 9).[1] Is it again him or is it not rather Tityos that must be seen in the [illegible] lying on the ground [illegible]? Elsewhere is the Gorgon in full course; its pose is that given to it on many other archaic monuments,[1] but what is particular here is that it seems to have feathers on its tongue.

Note 2.p.8. By an error in our Vol. II (Fig. 482, 16) that [illegible] this intaglio among Mycenaean stones.

Note 1.p.9. Histoire de l'Art. Vol. [illegible], p. 246, Fig. 115.

Note 1.p.9. Same type and same forms on an archaic relief from Olympia. (Olympia. Die Bronzen, no. 698, 3).

Note 2.p.9. Furtwängler. Pl. V, 34.

Note 3.p.9. Histoire de l'Art, Vol. VIII. Figs. [illegible], 126, 216.

Scenes borrowed from real life are rather rare in this series, than images of fantastic animals and mythological subjects. On two intaglios are a chariot and its driver. Elsewhere is a the prow of a ship, an anchor, a cantharis, etc.

With even those intaglios that have the most archaic appearance,

Another novelty:- marine demons that present very diverse a appearances. There is a serpent with a body terminated by a tail provided with fins. There are goats with winged horses with the rear body of a fish. Elsewhere the body of a man ends in the same fashion.

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Note 2.p.8. By an error in our Vol. II (Fig. 432, 16) that reprented this intaglio among Mycenaean stones.

Note 3.p.8. Histoire de l'Art. Vol. VII, p.222, Fig.96; p. 246, Fig. 115.

Note 1.p.9. Same pose and same bands on an archaic relief f from Olympia. (Olympia. Die Bronzen, no. 669, 3).

Note 2.p.9. Furtwängler. Pl. V, 34.

Note 3.p.9. Histoire de l'Art. Vol. VIII. Figs. 117, 124, 126, 246.

Scenes borrowed from real life are rather rarer in this series, than images of fabulous animals and mythological subjects. On two intaglios are a chariot and its driver. Elsewhere is t the prow of a ship, an amphora, a cantharis, etc.

With even those intaglios that have the most archaic appearance,

one feels himself already far from the geometrical style and its glacial coldness; but he is no less informed by less certain indications, that he does not have to recognize here the works of the Mycenaean engraver. That Mycenaean engraver already knew the sphynx and the griffin; but not from him was taken that of Melos. In the ivories, the plates of gold and the mycenaean glass pastes, the griffin and sphynx are distinguished by traits found nowhere else in the representation of the same monsters. Behind the head of the griffin are light curls of spiral form;[4] on the female head of the sphynx and above a sort of cap is a long plume like a floating crest.[5] These special signs are no longer found on archaic Greek gems. Griffin and sphynx show themselves as the Phoenician s present them in numberless replicas. There in the decoration of all Sidonian and Tyrian wares, our engravers have sought for copying the types of the griffin and the sphynx. No more curls on the nape of the griffin; no more plumes on the head of the sphynx; but what solves the question of origin for the sphynx and griffin as for the other winged quadrupeds is the arrangement adopted by the Greek artists for the design of the wings. In Egypt these have the point turned in only on some images of birds that ornament jewels;[1] more frequently they are extended horizontally and perpendicular to the body.[2] When they are found exceptionally on the back of a sphynx, the large plumes terminating them are turned toward the ground.[3] In Assyria the wings attached to the shoulders of the bulls guarding the royal gates a and those of other monsters are horizontal,[4] or are more frequently raised with the point to the rear.[5] This is the position on the figures of anthropoid genii taken by those wings, that are raised, while the others are lowered and fall on the loins.[6]

Note 4.p.9. Furtwängler. Pl. V. Histoire de l'Art. Vol. VI, p. 839, Fig. 414.

Note 5.pp9. Histoire de l'Art. Vol. VI. p.833-834, Figs. 416,418.

Note 1.p.10. Histoire de l'Art. Vol. I. Figs. 566,568.

Note 2.p.10. The same. Figs. 542,543,567,577, etc.

Note 3.p.10. The same. Vol. III, Fig. 74.

Note 4.p.10. The same. Vol. II, Figs. 19, 83.

Note 5.p.10. The same. Pl. IX; Figs. 85,139,141,240,322,331, 343,443,444,446,447,449, etc.

Note 6.p.10. The same.Figs. 123,124,322,323,331,343,348,etc.

The Phoenicians appear to have first had the idea of folding the ends of the wings forward, and inclining them toward the head of the animal represented. This characteristic arrangement is almost constantly found either in Phoenicia itself or in Cyprus in ornamental reliefs,[7] or nearly everywhere on those metal cups, jewels and scarabs of soft stone, glazed clay or glass, that from one end of the Mediterranean to the other, Phoenician merchants sold to the peoples that they had made tributary to their industry.[8] Greek artists appreciated that arrangement, the elegant curve thus described by the wings; they adopted it for all images of this kind that they caused to enter their d decoration (Fig. 10).

Note 7.p.10. Histoire de l'Art. Vol. III, Figs.73,76,152.

Note 8.p.10. The same. Figs.75,547,552,625,628. Better informed now than in the past, we no longer hesitate to place to t the account of Phoenician industry three monuments in which is found the arrangement of the wings mentioned, monuments that we have described in connection with Assyria (Histoire de l'Art, Vol. II, Figs. 347, 399, 447). The first is a seal in form of a cone with an Aramean inscription; the second is a bronze cup ornamented by a frieze of griffins, the third is a comb of ebony.

It is rare that one knows with certainty where and in what conditions the intaglios of our collections left the earth.

Among the stones which we have just studied are several, whose source is well established; others have been collected in the tombs of Melos. Now the same cemetery has also furnished vases, that from the composition and execution of the paintings decorating them are attribtuted to the 7 th century. Thus we have in that find a landmark, a criterion that permits the undertaking of a classification of archaic intaglios, it becomes possible to set aside in the multitude of those stones, those which one has reason to believe earlier than the year 700 or a little later than that date, thus belonging to those of the first period of the new development of Greek glyptics.

For the most part, these stones have the ordinary forms of Mycenaean seals, lenticular or acorn-shaped; but at the same epoch, the taste for exotism was then very lively in Greece, and gave the idea of imitating in the workshops where those seals were cut, certain forms affected by oriental glyptics. Some efforts were made to place in fashion the cylindrical

type, and for many centuries by Chaldea and Assyria. We have already found the cylinder in the island of Cyprus, the one of all Greek lands, which was soonest and most lightly orientalized.[1] If we are permitted this neologism; but we shall find it even the heart of Greece in a cylinder collected at Aegina. On it are two figures, a warrior that mounts his chariot and a satyr fighting with a woman.[2] More rare is a cylinder whose style renders it particularly curious (Fig. 11). It was found in Chaldea;[3] but the image on it is entirely Greek in subject and execution. Perseus slaying the Gorgon is recognized at first sight. Perhaps the cylinder had belonged to one of those Greek adventurers, who went to seek his fortune in Babylonia,[4] like Antimenides, brother of Alcaeus. This personage had desired, while he inhabited the valley of the Euphrates, to have a seal like the seals of the country, which he could apply to moist clay, but before leaving the coast, he had caused the engraving to be executed by an Ionian workman.

Note 1.p.11. Histoire de l'Art. Vol. III, p.638-641, Figs. 432-435. Furtwängler. Die antiken Gemmen. Vol. III, p. 438, Pl. V, 44.

Note 2.p.11. Furtwängler. Pl. I, 42.

Note 3.p.11. The same. Vol. II, p.31.

Note 4.p.11. Histoire de l'Art. Vol. VIII. p.720, note 2.

The Ionians maintained with Phoenicia and Egypt relations far more intimate than with Chaldea. They sought the products of Egyptian industry and the counterfeits cheaply made in the workshops of Syria. In the tombs of Rhodes from which our illustrations have been taken several scarabs in glazed clay, that in Egypt had a symbolical and mystical value.[1] The idea must have occurred to utilize that form in the making of seals. Nothing easier than to copy it in stone, but to substitute on the flat side of the piece, for the hieroglyphics and the images of the Egyptian gods, those borrowed from the current repertory of the Greek workmen. For example, here is a scarab whose lower surface represents a lion attacking a bull from behind (Pl. I, 3).

Note 1.p.12. Furtwängler. Vol. III, p. 83. On the religious significance of this form, see [illegible]. p.238-282).

Among the monuments of this glyptics is more frequently found

type, used for many centuries by Chaldea and Assyria. We have already found the cylinder in the island of Cyprus, the one of all Greek lands, which was soonest and most rapidly orientalized,[1] if we are permitted this neologism; but we shall find it at even the heart of Greece in a cylinder collected at Egina. On it are two groups, a warrior that mounts his chariot and a satyr fighting with a woman.[2] Here again is a cylinder whose origin renders it particularly curious (Fig. 11). It was found in Chaldea;[3] but the image on it is entirely Greek in subject and execution. Perseus slaying the Gorgon is recognized at first sight. Perhaps the cylinder had belonged to one of those Greek adventurers, who went to seek his fortune in Babylonia,[4] like Antimonidas, brother of Alcaeus. This personage had desired, while he inhabited the valley of the Euphrates, to have a seal like the men of the country, which he could apply to moist clay. but before leaving the coast, he had caused the engraving to be executed by an Ionian workman.

Note 1.p.11. Histoire de l'Art. Vol. III. p.636-641, Figs. 429-434. Furtwängler. Die antiken Gemmen. Vol. III,p.8,436, Pl. V, 44.

Note 2.p.11. Furtwängler. Pl. V, 42.

Note 3.p.11. The same. Vol. II, p.24.

Note 4.p.11. Histoire de l'Art. Vol. VIII. p.720, note 2.

The Ionians maintained with Phoenicia and Egypt relations f far more intimate than with Chaldea. They sought the products of Egyptian industry and the counterfeits cheaply made in the workshops of Syria. In the tombs of Melos from which our intaglios came have been found several scarabs in glazed clay, that in Egypt had a symbolical and mystical sense.[1] The idea must have occurred to utilize that form in the making of seals. Nothing easier than to copy it in stone, and to substitute on the flat side of the piece, for the hieroglyphics and the images of the Egyptian gods, those borrowed from the current repertory of the Greek workman. For example, here is a scarab whose lower surface represents a lion attacking a bull from behind (Pl. I, 3).

Note 1.p.12. Furtwängler. Vol. III, p. 69. On the religious significance of this form, see Maspero. (Archaeologie egyptienne. p.236-238).

Among the monuments of this glyptics is more frequently found

ized the scarab, another form called the scaraboid. Thus are designated seals on which the outline of the form describes an ellipse more or less elongated. As for the body of the seal, it is swollen and is rounded in the form of a calotte (Fig. 14). The term consecrated by usage risks leading into error. As one might think, the scaraboid is not the covering of the scarab. Nothing that recalls the organic type to which it has been desired to connect it. These pretended scaraboids are only derivations from seals in the form of a cone, that in all western Asia about the time of the Sargonides commenced to dispute the favor of the public with the ancient cylinder.[2] Gradually to save less expense for material and work, the workman adopted the habit of truncating the cone. He retained only what was necessary to allow the fingers to handle the seal.[3] In Asia all those fragments of cones have a circular base, and it was at f first the same in Greece;[4] but when among the Hellenes art proposed to give a translation in relief of those myths that poetry continually diversified, the image in relief assumed an increasing importance. To enlarge the field, they tended to pass from the circle to the ellipse. This allowed them to group in the direction of the greater diameter more personages, than c could be held within the round of the circle. By degrees they came to the very elongated form preferred by the engravers of the 6 th century.

Note 2.p.12. Histoire de l'Art. Vol. II. p.688-691.

Note 3.p.12. Furtwängler. Vol. III, p.101-102.

Note 4.p.12. The same. Vol. III, p. 60, Figs. 41-43.

The seals with these reserves, for which can be retained this appellation of scaraboids, rather present a great variety of forms. They are found where the ellipsoidal stone has two plane faces. On one is a headless person with the wings marked by vertical rays and in the attitude of adoration (Pl. II, 17). On the other is a lion passant (Pl. II, 15). The influence of Oriental models is very sensible here. Around the worshipper are emblems that the Egyptian monuments have made familiar to us, the hawk and the lotus flower. The lion is of the Egyptian style, and above it reappears the flower of the lotus.

There are also seals with convex bases. On one of them is a kneeling archer that discharges an arrow at a bull with head

than the scarab, another form called the scarabeoid. Thus are designated seals on which the outline of the face describes an ellipse more or less elongated. As for the body of the seal, it is swelled and is rounded in the form of a calotte (Fig. 12). The term consecrated by usuage risks leading into error. As one might think, the scarabeoid is not the covering of the scarab. Nothing that recalls the organic type to which it has been desired to connect it. Those pretended scarabeoids are only derivations from seals in the forms of a cone, that in all western Asia about the time of the Sargonides commenced to dispute the favor of the public with the ancient cylinder.[2] Gradually to have less expense for material and work, the workman adopted the habit of truncating the cone. He retained only what wau n necessary to allow the fingers to handle the seal.[3] In Asia all those frustums of cones have a circular base, and it was at f first the same in Greece;[4] but when among the Hellenes art proposed to give a translation in relief of those myths that poetry continually diversified, the image in relief assumed an increasing importance. To enlarge the field, they tended to pass from the circle to the ellipse. This allowed them to group in the direction of the greater diameter more personages, than c could be held within the round of the circle. By degrees they came to the very elongated form preferred by the engravers of the 6 th century.

Note 2.p.12. Histoire de l'Art. Vol. II. p.688-691.

Note 3.p.12. Furtwängler. Vol. III, p.161-162.

Note 4.p.12. The same. Vol. III, p. 60, Figs. 41-43.

The seals with these reserves, for which can be retained this appellation of scarabeoids, further present a great variety of forms. They are found where the ellipsoidal stone has two plane faces. On one is a beardless person with a tunic striated by vertical rays and in the attitude of adoration (Pl. II, 17). On the other is a lion passing (Pl. II, 19). The influence of oriental models is very sensible here. Around the worshipper are emblems that the Egyptian monuments have made familiar to us, the hawk and the lotus flower. The lion is of the Egyptian style, and above it reappears the flower of the lotus.

There are also seals with square bases. On one of them wish a kneeling archer that discharges an arrow at a bull with long

forms. In the field is the sun, the crescent moon and a star. (Pl. II, 12). Oriental glyptic suggested the idea of placing these luminaries in the field, although they have no relation to the scene represented. The other seal is of larger dimensions. There is seen a helmeted warrior clothed in a tunic [illegible] at the waist and in a sort of pantaloons. He holds with one hand a buckler by the [illegible], that is to say [illegible] with a lance in the other. He appears to have a sword at his side. In the field is a wheel with five spokes, that is perhaps also an astral emblem (Pl. II, 9).

It is necessary to see a seal or an amulet in a cube of serpentine, engraved on four sides, and still having its gold ring? It matters little. All very recently the intaglios described above. 1, a standing personage facing a lion; 2, two lions facing each other and raised on their hind feet; 3, a [illegible] archer; 4, it is believed that a priest is distinguished, in adoration before a sacred tree. If as assured, this jewel was found on the plain of Marathon,[1] the soldier that lost it on the field of battle must have been some Ionian or Carian auxiliary, rather than a Persian or a Mede. Doubtless some elements here, such as the sacred tree, were borrowed from Oriental art; but no less is the hand of a Greek artist is felt here.

[1] [illegible] *gravées de la Bibliothèque nationale*. No. 872.

Finally, here is a last variant of the seal of a rarer form. It is a circular seal with a lateral ring. A personage that seems to have four legs, perhaps a centaur in front, holds a spear in one hand and with the other strikes by her long and flowing hair a half kneeling woman (Pl. II, 13). Would that [illegible] of this scene of the centaurs and lapiths, which must have been one of the preferred themes of Greek sculptors!

The intaglios purchased by us [illegible] of Greece, by reason of their themes and their execution, seem to us, should be attributed to the same time and the same school as the stones of Melos. The material is also the same in all cases. It is serpentine or steatite. Except a single one, that has its [illegible] or perhaps its legend, these intaglios are of unknown sources. Yet we shall not hesitate to place them also in the a

horns. In the field is the sun, the crescent moon and a star.. (Pl. II, 12). Oriental glyptics suggested the idea of placing those luminaries in the field, although they have no relation to the scene represented. The other seal is of larger dimensions. There is seen a helmeted warrior clothed in a tunic gathered at the waist and in a sort of pantaloons. He hlods with one hand a quadruped by the hind paw, that he is going to strike with a lash in the other. He appears to have a sword at his side. In the field is a uheel with five spokes, that is p perhaps also an astral emblem (Pl. II, 9).

Is it necessary to see a seal or an amulet in a cube of serpentine, engraved on four sides, and still having its gold ring? It matters little: all here recalls the intaglios described a above. 1, a standing personage facing a lion; 2, two ibexes f facing each other and raised on their hind feet; 3, a bearded sphynx; 4, it is believed that a priest is distinguished, in adoration before a sacred tree. If as assumed, this jewel was found on the plain of Marathon,[1] the soldier that lost it on the field of battle must have been some Ionian or Carian auxiliary, rather than a Persian or a Mede. Doubtless some elements here, such as the sacred tree, were borrowed from oriental art; but no less is the hand of a Greek artist is felt here.

Note 1.p.13. Chabouillet. Catalogue des camees et pierres g gravees de la Bibliotheque nationale. No. 972.

Finally, here is a last variant of the seal of a rarer form. It is a circular seal with a lateral ring. A personage that seems to have four legs, perhaps a centaur seen in front, holds a sword in one hand and with the other seizes by her long and floating hair a half kneeling woman (Pl. II, 10). Would that not be an episode of that combat of the Centaurs and Lapithae, which must have been one of the preferred themes of Greek sculpture?

The intaglios furnished to us by the Cabinet of France, by reason of their themes and their execution, have seemed to us, should be attributed to the same time and the same school as the stones of Melos. The material is also the same in all parts. It is serpentine or steatite. Except a single one, that has its history or perhaps its legend, these intaglios are of unknown scenes. Yet we shall not hesitate to place them also to the a

account of Ionian genius. We shall see that in Ionia were struck the first coins. Likewise in Ionia were made the first efforts to revive the art of Intaglio. The procedures of the coinage industry extended from the East to the West in the Greek world only with some slowness, and there was also necessary a certain time for the taste for those intaglios to be propagated in the same direction, as well as the trade of the engraver. This is suggested by the funerary equipment of the cemeteries of Sicily, Magna Grecia and Etruria. Everywhere these in the tombs that date from the end of the 8 th century and from the entire course of the 7 th, are found in abundance scarabs of glazed clay or of soft stone of Egyptian or Phoenician execution, but no engraved stones. These make their appearance in the cemeteries of western Greece only about the beginning of the 6 th century.[1]

Note 1.p.14. Furtwängler. Vol. III, p. 75-76.

Further, not alone from this point of view can one compare these two arts. We shall find on the most ancient coins most of the images of these very archaic intaglios.[2] It must have been the same artists that executed the engraving of those seals and those of the coins for money. For the entire period of the geometric style cannot be cited a single intaglio engraved in the metal of the bezel of a ring, while this mode of d decoration was applied to a silver ring, that came from the island of Syme quite near Melos. The image there represents a g griffin and another animal, a fox or dog, skilfully arranged to fill the entire field (Fig. 13). To judge by the execution, this ring was contemporaneous with the Melian stones and those that we have compared with them. What forms the particular intesest is, that it announces the resumption of a procedure employed by the Mycenaean engravers with rare mastery.[1] Glyptics has all ambitions toward the end of the 7 th century. It only remains to realize them, a supply of hard and translucent gems to which it was unaccustomed, and to make use of them only to again learn to handle the drill.

Note 2.p.14. Furtwängler. Vol. III, p.74. Babelon. La gravure en pierres fines. p.26, 27.

Note 1.p.15. Histoire de l'Art. Vol. VI. p.838-847, Figs. 420-430.

2. Glyptics in the 6 th Century.

From Egypt in which they felt at home after the 7 th century,

the Greeks of Asia borrowed the form of the scarab, but not f from its school must they have iyitiated themselves in such delicate processes as engraving on hard stones, as they had done for welding metals and casting bronze. The Egyptian workman was not ignorant of those processes;[2] but the use of the personal seal was not so universally extended in Egypt as with the Chaldeans, and doubtless by reason of the popularity e enjoyed in the latter country by the industry of glazed clay, they were not much addicted to the work of intaglio. To speak truly, there is no Egyptian glyptics.[3] The true country or mother of glyptics is the Asia of the Euphrates with the common presence of the seal, that struck Herodotus.[4] It is said that the valley of the Euphrates is much farther than Egypt from Miletus and Ephesus, but then neither mountains nor deserts frightened the wandering propensity of those Greeks, that is our time are also as mobile, and that we see established in small groups of retailers, bankers or tradesmen, from London to Calcutta, from the African Soudan to Odessa. Under whatever name they traveled, they inquired and observed everywhere that they went. They are represented as strolling for long hours in the bazaars of those great cities in which were exercised multiplied industries, some of which were again known to the Greeks only by rare specimens of their products, which had found places in the bales of some caravan. One of them that had himself formerly handled the chisel and the graver, a goldsmith or jeweller, stops in the gallery of the merchants of seals, before one of those boxes, at the same time workshops and shops, in which today in Tunis, Cairo or Damascus, the artisan fabricates under the eyes of the public the wares that he offers for sale. For another passer that looks at him, the silent worker does not interrupt his work; but this passer is found to be intelligent and a well informed observer. He follows with close attention the movements of the wheel and the uses of the instruments, that concur with the drill in creating and finishing the image. If he has not understood all on the first day, he returns on the morrow, and at the end of two or three occasions, he will have seized the secret even of those tricks of hand, which the operator that practises them by routine would frequently have trouble to teach by demonstrative reasoning.

Note 2.p.15. Furtwängler. Vol. III, p. 1-2.

Note 3.p.15. Histoire de l'Art. Vol. II. p.661-692.

I imagine that the Greek engraver by these notes taken as if by theft, when he has aroused about himself all the arts of f form, will have succeeded in reviving an entire technics almost completely lost, to recall it even to the last refinements. Perhaps also more than one of those that attempted this profession arranged to enter some workshop as an apprentice, where from generation to generation were transmitted the most delicate p processes of oriental glyptics. Cylinders were engraved by Chaldean methods among the Hittites of the plateau of Cappadocia ;[1] They were perhaps also engraved in that city of Sardes, whose princes were in direct relations with the Assyrian monarchs. In whatever fashion was made the retraining of the Greek engraver, this is certain, that he is seen about the beginning of the 6 th century to set himself to carving all those gems of variously colored quartz, whose charming tints are brightened by the light, which caresses and penetrates them, while their hardness adapts them to retain always clear and fresh the image deposited there by the tool of the artist.

By the material employed and the execution of the image, the Greek intaglio then revives Chaldeo-Assyrian art; but it is Egypt, that Egypt so fully open to the Greeks of Asia and of the islands, which is recalled by the form of the seal and its general appearance. In the 6 th century, most seals are scarabs with figures on the flat surface (Fig. 14); but since the Greeks a attached no mystic sense to the type of the scarab, they have sometimes replaced it on the back of the scarab by some other motive, by a hippotamos (Fig.1), ram or negro's head, mask, (Fig. 16), siren, kneeling warrior or crouching lion (Fig. 17). The form most frequently found after that of the scarab is that of the scarabeoid. There are also some rare specimens of the acorn shape inherited from Mycenaean glyptics, which remained familiar to the engravers of the 7 th century.

Note 1.p.16. Histoire de l'Art. Vol. IV, p. 765-774, Figs. 373-386.

Note 1.p.17. Furtwängler. Vol. I, Pl. VI, 57.

If by the forms that it adopts and the procedures it uses, this glyptics still allows to be perceived its connections either to the civilization of the Achaian ancestors or especially to the arts of the Orient, one feels everywhere asserted the

independence and originality of Greek genius thenceforth fully emancipated. This originality is first marked in the choice of subjects and in their infinite variety. On the flat surface of Egyptian and Phoenician scarabs are always the same hieroglyphics; and the same symbols that are seen to reappear to satiety. On the Babylonian and Persian cones are the smae scenes of adoration, repeated with attitudes and gestures fixed by the ritual. Here is nothing similar. If certain themes reappear very frequently in the works of this glyptics, there is nearly always between one stone and another sensible differences in the number, grouping and the traits of the figures of the same scene. Many of these themes are borrowed from mythology; but there is nothing in the composition, that gives reason to think that one should seek there the seal of a priest or of a college of priests. No scene by the invariable fixity of its arrangement can be interpreted as the traditional representation of a liturgical act. Nowhere is any trace of what is called the sacerdotal spirit.

Note 2.p.17. Histoire de l'Art. Vol. II. Figs. 348-350; III. Figs. 454, 455, 457, 477.

If gods and goddesses here play a great part as well as the heros and the fictitious beings associated with them by the m myth, no less great is the proportion of the elements furnished by reality. No fixed rule and no point of systematic tendency. The dactylioglyphe has the taste for and the love of life, of that life interesting it in all the forms that it assumes, and under all appearances that it presents. What it has aimed to reproduce everywhere that it is met, is the nobility and the singularity of a type, the grace and energy of a movement.

In Chaldea and Assyria, Egypt and Phoenicia, the engraver h has scarcely been more than a workman, sometimes marvellously skilful. Here by what admits of liberty of invention and choice of motive, the engraver becomes an artist in all the force of the word. Thus the consciousness that he has of his own increased importance and of his new dignity is henceforth marked by the care, that he takes to inscribe his name on his work, doubtless when it seems to him more particularly successful. In that respect, he follows the example given him by the sculptor; but signatures are rarer on intaglios than on statues, in this class of objects which a workshop produces in great number for

current coin, those will always remain questionable. The formulas are the same as for the works of sculptors and of painters. On an intaglio where the subject is engraved on the back of the mass of Minerva is read: - "Koylos epoiee."(Fig. 33). On the flat of a scarab are engraved the image representing a young man bending with both hands on the withers of a horse that rears, is engraved the following legend:- "Epimenes epoie."(Fig. 15). The execution of the gem is most careful and most beautiful. Its characters show the artist signed this seal. The alphabet is the Ionian but with certain peculiarities in the use of certain letters, that are only found in the inscriptions of Thasos, Siphnos, Delos and especially Paros. Paros then furnished marble and sculptors to the entire Greek world.[1] Hence without improbability one may think of Epimenes as a Parian artist.[2]

Note 1.p.18. Histoire de l'Art. Vol. VIII.p.161-165,311,332.

Note 2.p.18. Furtwängler. Vol. II, p. 44.

If in those two examples the sense of the legend leads to no uncertainty, it is no longer the same when on an intaglio one reads with a proper name without a verb, of which it might be the subject, and without a noun that might be its complement.[1] One can then ask whether this name is that of the engraver or that of the owner of the intaglio, for the latter also sometimes caused his name to appear on his seal; this was for him a means of giving a more certain guarantee of authenticity of the documents on which he placed his seal. "I belong to Kreontides" is read on an agate scarab found at Aegina.[2] It must be noted that the inscription instead of being traced as an exergue to the image, invades nearly all the space that this usually occupies. That is the case for the scarab on which, above a dolphin made out with difficulty, is developed this legend in very archaic characters; "I am the seal of Thersis, beware of opening me."(Fig. 16). Is this an assertion of ownership of the intaglio, or an author's right that must be seen in these words, what are in the uncertainty and mystery in the question; in this case the question then is only of an engraved stone, and the uncertainty is still greater, where as frequently happens, there is found on the stone only a group of two or three letters, that might be the initials of an artist's name or that of the owner.

Note 1.p.19. Furtwängler. Vol. I, Pl. VIII, 19, 41, 43; IX.

current sale, those will always remain exceptional. The formulas are the same as for the works of sculptors and of painters. On an intaglio where the scarab is replaced on the back by the mask of Silenus is read:- "Syrius epoise."(Fig. 18). On the f flat of a scarab and around the image representing a young man holding with both hands on the bridle of a horse that rears, is engraved the following legend:- "Epinemenes opoie."(Fig. 19). The execution of the type is most careful and most beautiful. One comprehends why the artist signed this seal. The alphabet is the Ionian but with certain peculiarities in the use of certain letters, that are only found in the inscriptions of Thasos, Siphnos, Delos and especially Paros. Paros then furnished marble and sculptors to the entire Greek world.[1] Hence without i improbability can one think of Epigenes as a Parian artist.[2]

Note 1.p.18. Histoire de l'Art. Vol. VIII.p.161-165,311,352.

Note 2.p.18. Furtwängler. Vol. II, p. 44.

If in those two examples the sense of the legend leads to no uncertainty, it is no longer the same when on an intaglio one meets with a proper name without a verb, of which it might be the subject, and without a noun that might be its complement.[1] One can then ask whether this name is that of the engraver or that of the owner of the intaglio, for the latter also sometimes causes his name to appear on his seal; this was for him a means of giving a more certain guarantee of authenticity of t the documents on which he placed his seal. "I belong to Kreontidas" is read on an agate scarab found at Egina.[2] It even occurs that the inscription instead of being added as an exergue to the image, invades nearly all the space that this usually occupies. That is the case for the scarab on whose flat, above a dolphin made out with difficulty, is developed this legend in very archaic characters; "I am the seal of Thersis, beware of opening me."(Fig. 20). Is this an assertion of ownershop of the intaglio, or an author's right that must be seen in other names, that are in the nominative and others in the genetive? In this case the question does not admit of an assured response, and the uncertainty is still greater, where as frequently happens, there is found on the stone only a group of two or three letters, that might be the initials of an author's name or that of the owner.

Note 1.p.19. Furtwängler. Vol. I, Pl. VIII, 28, 41, 43; IX,

11, 15; Pl. LXI, 14. Babelon, Catalogue de la Collection Pauvert de la Chapelle. Numbers 67, 74.

Note 1.p.19. Furtwängler. Pl. VII, 44.

What completes the demonstration of the importance of the part then played by the seal, a representation of the person, is the care taken by public officials to prevent frauds to which the use might give rise. We have the text of a law attributed to Solon. It forbids the engraver to retain, either to sell himself or to place in the hands of another, the impression of the seal, that he has delivered to his patron.[3]

Note 3.p.19. (Greek). Diogenes Laertius. I, 57.

At Athens we are very near Ionia, and to that the unfortunately too rare ancient documents refer us, that have treated of the history of glyptics. We owe one of these to the glory of Pythagoras and the curiosity that it aroused among the learned of the Hellenistic age. According to the statements of his biographers, Pythagoras' father was Mnesarchos, an engraver of seals.[1] One cannot be surprised to see the art of intaglio cultivated in that island, where at about the same time flourished that of bronze.[2] The latter art of hollow casting and of fine retouches with the chisel, another Samian, Theodoros, son of Telecles, had introduced and acclimated in Asia and insular Greece. This Theodoros was no less famed as an engraver of fine stones than as a bronze-worker. Herodotus was almost a contemporary, as well advised of the history of Samos, and he attributed to Theodoros the fashion of the celebrated jewel, an emerald set in a gold mounting, that is ordinarily called the ring of Polycrates;[3] by the manner in which he speaks of it one may ask whether it was not rather a suspension ring fitted with a pin through which passed the thread. In any case there was an image engraved on the flat face of the emerald;[4] this is clearly expressed by the term which Herodotus uses concerning the jewel; he employs the word "sphragis," seal.

Note 1.p.20. Diogenes Laertius. I, 57. Apuleius. Florida.II,15,..

Note 2.p.20. Histoire de l'Art. Vol. VIII.p.289,290.

Note 3.p.20. Herodotus. III. 41.

Note 4.p.20. According to Clement of Alexandria, the image of a lyre was engraved on this seal (Paed. 59); but there is no great dependence to be placed on this evidence of a writer of the late epoch, who claims that the stone dear to Polycrates

11, 17; Pl. LXI, 14. Babelon. Catalogue de la Collection Pouvert de la Chapelle. Numbers 67, 74.

Note 2.p.19. Furtwängler. Pl. VII, 64.

What completes the demonstration of the importance of the p part then played by the seal, a representation of the person, is the care taken by public officials to prevent frauds to which its use might give rise. We have the text of a law attributed to Solon. It forbids the engraver to retain, either to use himself or to place in the hands of another, the impression of the seal, that he has delivered to his patron.[3]

Note 3.p.19. (Greek). Diogenes Laertius. I, 57.

At Athens we are very near Ionia, and to that the unfortunately too rare ancient documents refer us, that have treated t of the history of glyptics. We owe one of these to the glory of Pythagoras and the curiosity that it aroused among the learned of the Hellenistic age. According to the statements of his biographers, Pythagoras' father was Mnesarchos, an engraver of seals.[1] One cannot be surprised to see the art of intaglio cultivated in that island, where at about the same time flourished that of bronze.[2] The latter art of hollow casting and of fine retouches with the chisel, another Samian, Theodoros, son of Telecles, had introduced and acclimated in Asian and insular Greece. Now Theodoros was no less famed as an engraver of fine stones than as a bronze-worker. Herodotus was almost a contemporary, so well advised of the history of Samos, and he attributed to Theodoros the fashion of the celebrated jewel, an emerald set in a gold mounting, that is ordinarily called the ring of Polycrates;[3] by the manner in which he speaks of it one may ask whether it was not rather a suspension ring fitted with a ram through which passed the thread. In any case there was an image engraved on the field of the emerald;[4] this is clearly expressed by the term which Herodotus uses concerning the jewel; he employs the word "sphregis," seal.

Note 1.p.20. Diogenes Laertius. I, 57. Apuleius. Florid.II,15,3.

Note 2.p.20. Histoire de l'Art. Vol. VIII.p.289,290.

Note 3.p.20. Herodotus. III. 41.

Note 4.p.20. To believe Clement of Alexandria, the image of a lyre was engraved on this seal (Paed. 59); but there is no great dependence to be placed on this evidence of a writes of the late epoch, who claims that the stone dear to Polycrates

was preserved in the temple of Concord at Rome, and that it was a sardonyx and wrought by the tool. (Pliny. H. N. XXXVII, 4, 8. Strabo (Xiv. 1, 16) on the contrary, speaks of an engraving very carefully made; perhaps he had no positive data on this subject, reasoned well and divined.

The industry of cutting fine stones at about this time in S Samos certainly occupied a number of very skilful workmen, and again the name of Thedoros was pronounced in regard to the golden plane-tree, beneath which the king of Persia is said to h have been enthroned, and of that golden vine extendind ets branches over a couch.[5] In these goldsmith's works, the emerald would have represented the green grapes, and rubies with their red brilliancy, the ripe grapes. Theodoros would thus have been the distant predecessor of Lalique. To give the honor to this artist for all the important works executed in this kind in the Samian workshops, it was necessary for his initiative to have executed decisive effects on the progress of his profession. Now one word of Pliny informs us of the nature of the service rendered. Amnyg the inventions attributed to Theodoros by the historians of art, whose statements are reproduced by Pliny, appears that of the lathe.[1] What meaning is properly assigned to the word invention has been explained by us elsewhere.[2] In the 6 th century, industry had behind it in the acquirement of the civilizations of the Orient a past too long and too full, for a newcomer to have a great chance to innovate in the order of technics; but on that ground the Greeks had much to learn there from their elders. Some one of them in the course of his travels might succeed in appropriating and placing at the service of his compatriots one of those methods, which from time immemorial was in use in the valley of the Euphrates or that of the Nile, and without further inquiry, public gratitude saluted him with the name of inventor, him that had been merely a fortunate and skilful importer.

Note 1.p.21. Pliny. H. N. VII. 198.

Note 2.p.21. Histoire de l'Art. Vol. VIII. p. 289.

By the effect of one of those mistakes, Theodoros passed for having invented this engraver's lathe already employed by the Mycenaean workmen. Among the intaglios later than the year 600, there are very few that appear to have been executed without the aid of the treadle and the lathe. The equipment of the en-

[illegible]

in this sort of works.3

Note 3.p.21. Furtwängler. Vol. III. p. 92.

[illegible]

neglected.

[illegible]

cut as the diamond; even when mounted in the lathe, the tool

[illegible]

beautiful water.1

[illegible]

stones, see Babelon. La gravure en pierres fines, p. 5-22; also

[illegible]

speaks of a law that forbade the engraver; but at the same time

[illegible]

te such, that it would not be possible to cut them."

[illegible]

engraver thenceforth is that devoted to this kind of work during the following centuries, and also in our days. There is b but a slight difference. In the very archaic intaglios, even the most careful, the hollow surfaces of the intaglio remain slightly rough or at least matted. Only toward the beginning of the 5 th century did the artist undertake to obtain there the brilliant polish, that from that time will become the rule in this sort of works.[3]

Note 3.p.21. Furtwängler. Vol. III. p. 92.

From the 6 th century were no longer employed the opaque and soft stones only in case to work more rapidly, they desired to do without the use of the lathe. Seals to fashioned must cost much less than the others, even when their engraving was not neglected.

Neither then nor later did they attempt to engrave those stones with an alumina base, most precious of all, which the modern jeweler calls corundums.[4] They are almost as difficult to cut as the diamond; even when mounted in the lathe, the tool will succeed not in modeling the image with any freedom. As if to console themselves for that inability, it was declared to be a sacrilege to attack by steel the purity of gems of such beautiful water.[1]

Note 4.p.21. On the classification, chemical composition, and the names both ancient and modern of precious and semi-precious stones, see Babelon. La gravure en pierres fines, p. 5-22; also Article Gemmae in the Dictionaire des Antiquities of Daremberg and Saglio.

Note 1.p.22. Pliny. H. N. XXXVI. (Latin); XXXVIII,16, he speaks of a low that forbade the engraver; but at the same time avows, that had one attempted to do this, he would not have s succeeded;"the hardness of the emeralds of Scythia and of Egypt is such, that it would not be possible to cut them."

What men loved to work in the workshops, that supplied seals of luxury, were fine stones with a base of silica, varieties of quartz that reproduced with a little less brilliancy the v vivid colors of the corundums and their most delicate shades, not offering so much resistance to the tool. Those most frequently found in the series of archaic intaglios are cornelian, chalcedony, ribbon agate and sardonyx. Rock crystal is less frequently found. No amethysts. Some specimens of false emerald

are mentioned, and a paste that produces to the eye the illusion of the emerald. These pastes are still very rare; only later became general the use of that material, where the type of the seal was obtained by moulding in relief, which permitted the furnishing cheaply seals of a sufficiently beautiful appearance. The pieces of this sort which date from this time are mainly made of a blue paste, which aims to produce the effect of lapis lazuli.

In the manner that was distributed in the entire Greek world the knowledge and practical familiarity with the processes of execution, seals were multiplied and the images engraved thereon showed progress, like about the same time was made elsewhere in the workshops of the ceramists and sculptors. Its new mastery was in the figures of animals, of which the engraver made great. He then showed a marked preference for the type of the lion. He could scarcely study this type from nature; but the arts of the Orient offered him faithful proofs taken from life, which he interpreted with rare skill. The intaglios exhibit this lion in all attitudes, here walking with slow steps and the gait of the cat (Pl. I, 7), there springing in full course (Pl. I, 2), elsewhere in repose, half crouched on the ground and devouring his prey, and at last [illegible] represent him as landed on the prey, that he tears with his claws. His victim is sometimes the bull (Pl. II, 15) and sometimes a stag (Pl. II, 4). This struggle is one of the favorite themes of contemporary sculpture; there on the friezes of monuments of the temples, the engraver took the lion; but his desire to vary his repertory suggested to him images such as the lioness between two cubs (Pl. II, 7), or this lion passing and a bird flying above it (Pl. II, 5). If several of these intaglios are of a very archaic style, the progress of the art has caused the omission of this type. About the year 500 seems to date a [illegible] in [illegible] on which is seen a lioness ready to [illegible]ing. Above is the Ionian inscription:- [illegible] (Fig. 21).

Note 1.p.24. Histoire de l'Art. Vol. VIII, Figs.115,215,224.

Without appearing so frequently, the bull is not absent. Here he walks slowly (Fig. 22). There the artist has only given the front portion. The head is lowered as if to strike with the horns (Pl. II, 16). One also meets with a motive dear to Mycenian art, the cow suckling her calf (Pl. I, 16).[2] It is found

are mentioned, and a quartz that produces to the eye the illusion of the emerald. Glass pastes are still very rare; only later became general the use of that material, where the type of the seal was obtained by modeling in relief, which permitted the furnishing cheaply seals of a sufficiently beautiful appearance. The pieces of this sort which date from this time are mostly made of a blue glass, which aims to produce the effect of lapis lazuli.

In the mannes that was distributed in the entire Greek world the knowledge and practical familiarity with the processes of execution, seals were multiplied and the images engraved thereon showed progress, that about the same time was made elsewhere in the workshops of the ceramists and sculptors. Its new mastery was in the figures of animals, of which the engraver made proof. He then showed a carked preference for the type of the lion. He could scarcely study this type from nature; but the arts of the Orient offered him faithful proofs taken from life, which he interpreted with rare skill. The intaglios exhibit t this lion iu all attitudes, here walking with slow steps and the gait of the cat (Pl. I, 5), there springing in full course (Pl. I, 2), elsewhere in repose, half crouched on the ground and devouring his prey. Men no less loved to represent him as landed on the prey, that he tears with his claws. His victim is sometimes the bull (Pl. II, 13) and sometimes a stag (Pl. II, 4). This struggle is one of the favorite themes of contemporary sculpture; there on the friezes of pediments of the temples, the engraver took the idea;[1] But his desire to vary his repertory suggested to him images such as the lioness between two cubs (Pl. II, 7), or this lion passing and a bird flying above it (Pl. II, 5). If several of these intaglios are of a very archaic style, the progress of the art has caused the omission of this type. About the year 500 seems to date anscarab of beautiful execution on which is seen a lioness ready to spring. Above is the Ionian inscription:- Aristoteiches (Fig. 21).

Note 1.p.23. Histoire de l'Art. Vol. VIII, Figs.178,278,283.

Without appearing so frequently, the bull is not absent. Here he walks slowly (Fig. 22). There the artist has only given the front portion. The head is lowered as if to strike with the horns (Pl. II, 16). One also meets with a motive dear to Mycenian art, the cow suckling her calf (Pl. I, 16).[2] It is agin t

[illegible] with the elegant suppleness of their movements the ibex and t the deer. Here is an ibex bounding, again and there (Pl. II, 18). Elsewhere [illegible] a stag and a [illegible] (Pl. I,7). These are all the wild animals represented on these intaglios. One also finds there the horse rolling on the ground (Pl. II, 19), the [illegible] bounding (Pl. II, 21), the ram (Pl. I,3), a pointer that seems to flush a bird (Pl. I,6), a water spaniel (Pl. I, 11). Elsewhere is a crouching dog. He throws his head back to try to catch the insect that flutters and torments him (Pl. I, 15). Sometimes because of the narrowness of the field, only the front portion of the animal is placed on it, his protome, as the Greeks said. Thus in several places one finds side by side the protomes of the horse and the lion, and of a wild boar or of two bulls (Pl. III, 24).

[illegible] Histoire de l'Art, Vol. VI, Pl. XVI, [illegible].

The engraver no less delights in multiplying the images of all these artificial beings, that from the repertory of oriental artists have passed into that of Greek artists. Here is a winged lion (Pl. III, 1), the winged and horned lion with a cross in the field (Pl. III, 2), a winged wild boar (Pl. II, 11), a winged monster with the head of a wild boar and the tail of a fish, another monster with the head of a goat with wings and a bird's tail (Pl. III, 4), a winged griffin couching (Pl. III, [illegible]), or that walks slowly. The wings are pressed against each other and recurved forward (Pl. III, 6), or are widely separated (Pl. III, 10). The sphynx also very frequently appears. It is either seated on the ground (Pl. I, 10), or as at Delphi, on the [illegible], it is as a base in the form of a capital (Pl. III, 9). Elsewhere it devours an antelope (Pl. III, 20) or the corpse of a man (Pl. I, 16). He is also found crouching and turning the head, as if to listen to some one speaking to him.

The same turn of the imagination which produced the multiplication [illegible] has also frequently placed on seals figures of demons. The Greeks termed those beings of vaguely defined nature, that in the popular belief were placed between the heroes and the gods and the great gods of Olympus. Archaic glyptics has multiplied the images of these demons. They represent here, but are less singular, less designed to arouse the impression

again an old tradition resumed by the engraver, when he shows with the elegant suppleness of their movements the ibex and t the deer. Here is an ibex bounding, agile and light (Pl. II, 18). Elsewhere walk near each other a stag and a hind (Pl. I,7). These are not the sole animals represented on those intaglios. One also finds there the horse rolling on the ground (Pl. II, 15), the wild boar bounding (Pl. II, 21), the ram (Pl. G,9), a harrier that seems to flush a bird (Pl. I,6), a water spaniel (Pl. I, 11). Elsewhere is a crouching dog. He throws his head back to try to catch the insect that flutters and torments him (Pl. I, 15). Sometimes because of the narrowness of the f field, only the front portion of the animal is placed on it, his protome, as the Greeks said. Thus in several stones one finds back to back the protomes of the horse and the lion, and of a wild boar or of two bulls (Pl. III, 24).

Note 2.p.28. Histoire de l'Art. Vol. VI. Pl. XVI, 15.

The engraver no less delights in multiplying the images of all those artificial beings, that from the repertory of oriental artists have passed into that of Greek artists. Here is a winged lion (Pl. III, 1), the winged and horned lion with a cross in the field (Pl. III, 22), a winged wild boar (Pl. II, 11), a winged monster with the head of a wild boar and the tail of a fish, another monster with the head of a goat with wings and a bird's tail (Pl. III, 2), a winged griffin bounding (Pl. III, 10), or that walks slowly. The wings are pressed against each other and recurved forward (Pl. III, 6), or are widely separated (Pl. III, 10). The sphynx also very frequently appears. It is either seated on the ground (Pl. I, 10), or as at Delphi, on the monument of the Naxians, is on a base in the form of a capital (Pl. III, 8). Elsewhere he devours an antelope (Pl. III, 20) or the corpse of a man (Pl. I, 16). He is a also found crouching and turning the head, as if to listen to some one speaking to him.

The same turn of the imagination which produced the dactyliograph has also frequently placed on seals figures of demons. The Greeks termed those beings of badly defined nature, that in the popular belief were placed between the heros sung by t the poets and the great gods of Olympos. Mycenaean glyptics had multiplied the images of these demons. They reappear here, but are less singular, less designed to produce the impression

[illegible]
the torso of a lion (Fig. 23). It is the same for the monster
[illegible]
(Fig. 24). A certain demon has the head of an ass. Another un-
der a human head has a body, wings and legs of a cock.[1]

Note 1.p.25. Furtwängler. Vol. III. p. 100.

[illegible]
ning, one knee bent to touch the ground. He is clothed in a
[illegible]
holds a corpse that he grasps in his hand; with the left he dr-
ags behind him a quadruped drawn at too small a scale for it
to be possible to define the species (Pl. III, 19).[2] It has
[illegible]
fulness, that on fields of battle took possession of routed a
[illegible]

Like Phobos, the Gorgon was represented on the shields of h
eros. Her grimacing mask was thought to spread terror. For t
his reason it often appears on seals as tamer of wild beasts
and of monsters.[4] She is here on a beautiful intaglio, where
she holds two serpents by the necks (Fig. 25). Near the type
[illegible]
the rear part of a horse.[5]

[illegible]

[illegible]
ces him in combat with a lion (Pl. III, 15), or in opposition
[illegible]

of horror and fright. Doubtless because they respond to superstitions accredited in certain cantons, there are seen to persist some of the demoniac types of former times, for example, that of the personage with the legs and thighs of a man having the torso of a lion (Fig. 23). It is the same for the monster with the human body and the head of a bull; that is the Minotaur of Cretan myths. Alsewhere, to give that monster a more terrible aspect, he is given the doubled head of a bull with two serpents in hand, that he holds by the middle of the body (Fig. 24). A certain demon has the head of an ass. Another under a human head has a body, wings and legs of a cock.[1]

Note 1.p.2.. Furtwängler. Vol. III. p. 100.

On the other hand, here is a demon whose prototype does not seem to be found in the glyptics of ancient ages. Bearded and winged, he is represented in the conventional attitude of running, one knee bent to touch the ground. He is clothed in a short tunic; a cuirass covers the chest, in the right hand he holds a corpse that he grags in his rush; with the left he drags behind him a quadruped drawn at too small a scale for it to be possible to define the species (Pl. III, 19).[2] It has been desired to recognize Phobos in it. He personified frightfulness, that on fields of battle took possession of routed a armies, and on hunting grounds, of game surrounded in the battue.[3]

Note 2.p.25. Furtwängler. Pl. VI, 61.

Note 3.p.25. The same. Vol. III, p. 100.

Like Phobos, the Gorgon was represented on the shields of h heros. Her grimacing mask was thought to spread terror. For t this reason it often appears on seals as tamer of wild beasts and of monsters.[4] She is here on a beautiful intaglio, where she holds two serpents by the necks (Fig. 25). Near the type of the Gorgon, that of the Harpy is distinguished from it by the rear part of a horse.[5]

Note 4.p.25. Furtwängler. Pl. VI, 48, VII, 38-40.

Note 5.p.25. The same. Vol. III. p. 101.

Like the Gorgon and the Harpy, the Centaur is a being of violence and passion. In glyptics as in archaic statuary, the Centaur has the entire body of a man in front.[6] The engraver places him in combat with a lion (Pl. III, 13), or in opposition to a woman (Pl. III, 14). In this last image he has attached to

[illegible]

Note 1.p.23.However a winged centaur is on a painted vase of the Dipylon (Histoire de l'Art. Vol. VII, fig. 96.

[illegible] (Fig. 27). This image is freely placed on seals. He was reputed to bring good [illegible] (Fig. 29).

Note 2.p.26. Aristotle, quoted by Plutarch (Consolation of Apollonios, 27). See Plato. Banquet, p. 221, 223).

[illegible] fore the cratere from which he has taken the wine in the cup [illegible] which rests his right arm. His left hand lifts the cup that he has just emptied. Before him in the field is the cratere (Pl. [illegible] by two of those lions, which sculpture had borrowed early from the cycle of Cybele to give them a place in the cortege of Dionysos.

[illegible]

to the shoulders of the monster wings that are not usually given to him by Hellenic art.[1] On the contrary, he shows himself faithful to one of the most constant traditions of that art, when he makes the centaur a ravisher of woman (Fig. 26).

Note 6p.25. Histoire de l'Art. Vol. VII, fig. 115; VIII,102.

Note 1.p.26.However a winged centaur is on a painted vase of the Dipylon (Histoire de l'Art. Vol. VII, fig. 96.

The type of the Satyr in certain respects is related to that of the Centaur. The satyr resembles the centaur in the breadth of his face, whose lower part is inclosed by a tufted beard. He has the ears and tail of the horse. As lewd as the centaur, like him he pursues the nymphs of the forests (Fig. 27). This image is freely placed on seals. He was reputed to bring good fortune to those to whom he was willing to disclose the secrets of the mysterious wisdom, that he had brought with him from t the Phrygian valleys.[2] Doubtless for that reason, on a scarab he is seen to approach a sphynx, that he holds by the hair. P Perhaps there is a trace of some myth not preserved to us by literary tradition, and in which the satyr played the part of solver of enigmas, which that tradition attributed to Oedicus. (Fig. 28).

Note 2.p.26. Aristotle, quoted by Plutarch (Consolation of Apollonios, 27). See Plato. Banquet, p. 221, 222).

One can count in the number of the best works of this glyptics two intaglios that represent, one a nude satyr dancing before the cratera from which he has taken the wine in the cup held in his hand,[3] the other being a satyr seated on a rock on which rests his right arm. His left hand lifts the cup that he has just emptied. Before him in the field is the cratera (Pl. I, 13). A rarer theme is that of a satyr driving a chariot drawn by two of those lions, which sculpture had borrowed early from the cycle of Cybele to give them a place in the cortege of Dionysos.[3]

Note 3.p.26. Furtwängler. Pl. VIII, 4).

The demons that inhabit the shores and waters of the sea appear here,,but more rarely. Yet there are several images of t the satyr. It is represented as a woman with two wings attached to her back, whose body is covered by scales and terminates in the tail of a fish. In one hand she holds an object that seems to be a mirror and in the other a crown (Fig. 29). This is the

[illegible]

on and certainly dates from the 5 th century.

[illegible]

that have had a meaning in oriental art, but have lost it in roving about the world.[3] Here is the sphynx or the griffin that overthrows a young man,[4] or a nude man is between two sphynxes that he holds by the paws.(Pl. I, 8).

[illegible]

What then constitutes in the series of engraved stones of the [illegible] by peculiar superstitions. A certain type was thought to bring [illegible] these only appear to us as figured on a small number of archaic [illegible] the seal.

[illegible]

Siren of the Odyssey, the songstress that symbolizes the seductive and deadly power of woman.[1] Scylla is recognized in another type, that also recalls the memory of Homer. The artist has simplified with much taste the type described by the poet.[2] A torso of a young and beautiful woman, clad in a tunic that shows her form, is fixed to the body of a fish that terminates in front in the head and paws of a dog. The right arm of the woman extends in a gesture of menace; the left rests on the r rump of the monster. The intaglio is quite crowded in execution and certainly dates from the 5 th century.

Note 4.p.26. Furtwängler. Pl. VIII, 42.

Note 1.p.27. Homer. Odyssey. XII, 155-200.

Note 2.p.27. Homer. Odyssey. XII. 85-100.

More complex themes place the human figure in connection with all those artificial beings. One recognizes there groups that have had a meaning in oriental art, but have lost it in roving about the world.[3] Here is the sphymx or the griffin that overthrows a young man,[4] or a nude man is between two sphynxes that he holds by the paws.(Pl. I, 8).

Note 3.p.27. Histoire de l'Art. Vol. II, Figs. 305, 331, 399, 444, Vol. III, Figs. 425, 426, 456, 646.

Note 4.p.27. Furtwängler. Pl. VII, 30.

What then dominates in the series of engraved stones of the 6th century are all these figures of real or fanciful animals, of monsters and demons. They please by their exotic appearance. Also some are recommended by a secret virtue attributed to them by popular superstitions. A certain type was thought to bring good fortune. Another, like that of the Gorgon, had the character of apotropaion. It passed as turning aside misfortune, of protecting from its attacks the owner of the seal on which was engraved this image. It was more difficult to attach ideas of this kind to the representation of the Olympian deities. Thus these only appear to us as figured on a small number of archaic intaglios, where perhaps they evidence the particular devotion borne toward a certain deity by the person to whom belonged t the seal.

The Apollo Philesios of Kanachos, one of the largest works in statuary of the 6 th century, held a fawn in his right and extended hand.[5] Other monuments also attest the relation that the cult of art had established between the divine archer and

the deer. They all have not hesitated to recognize Apollo in a personage clad in a tunic closely fitted at the waist, hold-ing the bow in his right hand and an arrow in the left; before him is a deer (Pl. III, 23). Likewise there Apollos are two nude young men playing the lyre; one has one knee placed on a [illegible] of a rock; the other kneels on the ground.[2] The latter holds a dagger in his hand. This alludes to the name of Lycoc-tonos, after which this god was honored at [illegible]. [illegible] Hyperboreans.[3] [illegible] [illegible] found in the Peloponnesus (Pl. I, 12). The nude personage there that rides the swan with spread wings is Eros, and be-fore the neck of the bird, written in very small letters, is [illegible]. On the contrary, Apollo is un-doubt to be found in the image of a nude young man with a short [illegible] and a sceptre in the other. Behind him is a deer and a hawk n [illegible] of a statue of the first quarter of the 5th century.[3] [illegible] one of the idols that stood then in the temples of that city.

[illegible]

Note 1.p.28. Furtwängler. Pl. VI, 36; VIII, 22.

Note 2.p.28. The same. Vol. III, p.96-97; Fig. 68.

Note 3.p.28. The same. [illegible]

[illegible] Artemis is [illegible] queen of the wild beasts. Sometimes she is seen springing in full course. Beneath her feet is a lion. From her extended arms hand a roebuck and a hare (Fig. 31). Elsewhere she holds in [illegible] [illegible] the Persian Artemis.

Note 1.p.28. Furtwängler. Pl. VI, 51.

Hermes, the god of travels and of commerce, was indicated as [illegible] more frequently on seals than those of many other deities of [illegible]

the deer. Then men have not hesitated to recognize Apollo in a personage clad in a tunic closely girded at the waist, holding the bow in his right hand and an arrow in the left; before him is a deed (Pl. III, 25). Likewise again Apollos are two n nude young men playing the lyre; one has one knee placed on t the rump of a deer; the other kneels on the ground.[1] The latter holds a flower in his hand. This alludes to the name of Hyacinthios, under which this god was honored at Amyclea and Tarente. Two intaglios show Apollo returning from his journey to the Hyperboreans.[2] Like the Lohengrin of romance of the round table, he is borne by a swan that treverses the seas; but this not the god desired to be engraved by the cutter of an elegant intaglio found in the Peloponnesus (Pl. I, 12). The nude personage there that rides the swan with spread wings is bearded, and before the neck of the bird, written in very small letters, is riad the word heros, the hero. On the contrary, Apollo is thoought to be found in the image of a nude young man with a short mantle cast over his shoulders, that holds a branch in one hand and a sceptre in the other. Behind him is a deer and a hawk h higher on the field (Fig. 30). This intaglio seems to be a copy of a statue of the first quarter of the 5 th century.[3] The stone was found at Spasta. perhaps the engraver was inspired by one of the idols that stood then in the temples of that city.

Note 5.p.27. Histoire de l'Art. Vol.VIII, p. 472, Fig. 242.

Note 1.p.28. Furtwängler. Pl. VI, 36; VIII, 22.

Note 2.p.28. The same. Vol. III, p.96-97; Fig. 66.

Note 3.p.28. The same. Vol. III, p. 97.

More rarely represented, Artemis is scarcely more than the queen of the wild beasts. Sometimes she is seen springing in full course. Beneath her feet is a lion. From her extended arms hand a roebuck and a hare (Fig. 31). Elsewhere she holds in the same fashion a roebuck and a lion; but she has wings on t her back.[4] This is the type that is called the Persian Artemis.

Note 4.p.28. Furtwängler. Pl. VI, 51.

Hermes, the god of travels and of commerce, was indicated as the protector of the integrity of the seal, whose impression served as a guarantee of transactions; thus his image appears more frequently on seals than those of many other deities of Olympus. The most curious of these images is that presented to us by a cone of chalcedony (Fig. 32). Hermes is there beardless

and in festal costume, the mantle thrown over his shoulders [illegible]. He holds a flower in the right hand and the caduceus in the left. A wing is attached to each heel. Before him is an eagle, that is the messenger of Zeus [illegible] in a way. What is very particular here is the headdress of the god. Instead of the petasus by which it is usually recognized, he has on his head a sort of pointed cap. This cap h has the form of that worn by Hephaistos in the paintings on vases; but here it terminates in a wing at the top. Perhaps Hermes is figured there in his function of guide of the shades, with that cap of Hades that made him invisible.[1] Elsewhere the god of the palestra is represented by the engraver with the traits of a supple and vigorous ephebe. He is nude, except for a light mantle that falls in small folds on both arms, and he has the caduceus in the hand. Over his short hair extends a wide petasus (Fig. 33). There is no further trace of archaism than the so regular parallelism of the folds of the himation and the conventional pose of half kneeling. The modeling of the body is free and well shown. Sometimes one is also contented to place on intaglios only the head of the god, defined by the cap that is its constant attribute (Pl. III, 12).

Note 1.p.29. [illegible]

Athena does not seem to have inspired much the engravers of the archaic age. There is found to cite only one image of her, and there is still a doubt as to the name properly to be given to this figure. [illegible][2] On the contrary, the head and type consecrated by sculpture is found in the quite numerous intaglios, where the artist is contented to engrave the head of Pallas. On one of these pieces he has placed the owl beside the profile of the goddess (Fig. 34); but also this head is [illegible] accompanied by this accessory (Pl. III, 15).

Note 2.p.29. Furtwängler. Pl. VI, 36.

One cannot cite for this period intaglios on which are figured Zeus, Hades, Dionysos, Ares, Hera, Aphrodite, Demeter and Kore. Statuary had not yet created for these divine personages types, that correspond to the conceptions expressed by the poetry of the poems. When these types have been translated into Greek art by forms, that will give entire satisfaction to [illegible]

and in festal costume, the mantle thrown over his shoulders above a long tunic. He holds a flower in the right hand and the caduceus in the left. A wing is attached to each heel. Before him is an eagle, that as the messenger of Zeus duplicates Hermes in a way. What is very particular here is the headdress of the god. Instead of the petasus by which he is usually recognized, he has on his head a sort of pointed cap. This cap h has the form of that worn by Scythians in the paintings on vases; but here it terminates in a wing at the top. Perhaps Hermes is figured there in his function of guide of the shades, with that cap of Hades that made him invisible.[1] Elsewhere the god of the palestra is represented by the engraver with the traits of a supple and vigorous ephebe. He is nude, except for a light mantle that falls in equal folds on both arms, and he has the caduceus in the hand. Over his short hair extends a wide petasus (Fig. 33). Here is no further trace of archaism than the so regular parallelism of the folds of the himation and the conventional pose of half kneeling. The modeling of the body is free and well shown. Sometimes one is also contented to place on intaglios only the head of the god, defined by the cap that is its constant attribute (Pl. III, 12).

Note 1.p.29. Homer. Iliad. V, 844, Aristophanes. Acharnanians. V, 390; Plato. Republic. X, p. 612-B.

Athena does not seem to have inspired much the engravers of the archaic age. There is found to cite only one image on foot, and there is still a doubt as to the name properly to be given to this figure. No egis or wings on the back.[2] On the contrary, indeed the type consecrated by sculpture is found in the quite numerous intaglios, where the artist is satisfied to engrave the head of Pallas. On one of those pieces he has placed the owl beside the profile of the goddess (Fig. 34); but also this name is again imposed on other helmeted heads not accompanied by this accessory (Pl. III, 15).

Note 2.p.29. Furtwängler. Pl. VI, 56.

One cannot cite for this period intaglios on which are figured Zeus, Hades, Dionysos, Ares, Hera, Aphrodite, Demeter and Kore. Statuary had not yet created for these divine personages types, that worthily correspond to the conceptions suggested by the genius of its poets. When these had been translated into grand art by forms, that will give entire satisfaction to thought

and to taste, glyptics will seek its models there. It is thus with a number of intaglios after the end of the 5 th century, that will reproduce the head of Zeus of Phidias. It will be t the same for the nude Aphrodite after Praxiteles.

In the 6 th century, still unable to give much expression to the lines of the face, sculpture specially devoted its efforts to the types that could furnish it with an occasion to show the body in varied attitudes in the beauty of movement. For t this reason the sculptor of the time accorded to Hercules in his composition a privileged place.[1] The engravers of fine stones in that respect followed the example of the sculptors. H Hercules is the god whose image is most frequently found on t the intaglios of the archaic age.[2]

Note 1.p.30. Histoire de l'Art. Vol. VIII. p. 224,258-260, 363,366,373,378,410,485-486,532,549,654.

Note 2.p.30. This type is found not less than 13 times in Furtwängler's plates. See Vol. III, p.99.

He very properly appears with one knee bent in the conventional attitude of the race. He is bearded and holds the bow and the club (Fig. 35). He sometimes turns his head as if the wished to watch an enemy advancing behind him (Pl. III, 7). Hercules is also represented standing and walking, sometimes as a hunter of wild beasts. With the right hand, he brandishes his club above his head, and a fox seems hanging from the same arm. The left hand holds a lion by the tail, that in vain attempts to raise his head to bite (Fig. 36). One also sees in the intaglios, as in the sculptures of Attic pediments, the hero struggling against the hydra of Lerne [3] and against the marine god.[4] Elsewhere he overthrows the lion of Nemea, already himself covered by the skin of the lion (Pl. I, 21). An episode that has tempted more than one artist is the combat against the river Acheloos, figured as a bull rushing forward with lowered head.[1] There has also been freely represented the removal of the Delphic tripod. Here Hercules and Apollo contend for the tripod and seek to tear it from each other's hands;[2] There Hercules goes off alone carrying his booty and accompanied by the dog Cerberus.[3] A scarab of dry and hard work shows the hero receiving the reward of his exploits. A woman clothed in a long robe, Hebe or Nike, holds out a crown to him, that he receives stand-

standing, with one foot placed on a rock (Pl. III, 9). Other intaglios date only from the first years of the 5 th century and represent Heracles in varied attitudes, which the engraver seems to have chosen especially to exhibit his talent in drawing the nude male body.[4]

Note 3.p.30. Furtwängler. Pl. VI, 55.

Note 4.p.30. The same. Pl. IX, 2. See Histoire de l'Art. Vol. VIII, p. 273-274.

Note 1.p.31. The same. Pl. VIII, 3.

Note 2.p.31. The same. Pl. VIII, 40.

Note 3.p.31. The same. Pl. VIII, 8.

Note 4.p.31. The same. Pl. VIII, 39, 54; Pl. X, 4.

The winged and flying Eros that we have seen originate at Delos appears on many scarabs, that are the product of an already advanced art;[5] but one type that one is more surprised to meet in this series is that of this Eros, whose images would be so greatly multiplied in the art of the 5 th century. One cannot refuse to recognize it in a winged genius, that holds a crown in one hand and a lyre in the other and soars through space (Fig. 37). It is him again on a Cypriote scarab, that carries off in the air a young girl clasped in his arms (Fig. 38). This is a seal that Sappho might have ordered for her personal use from some engraver of Lesbos.

Note 5.p.31. Histoire de l'Art. Vol. VIII. p. 304-305.

Glyptics has given only a very limited place to the various episodes of the heroic myths. It has not followed the example offered to it very early by the ceramic painters. The reason for that difference is easily explained. The dimensions of the oval being given, the engraver was obliged to content himself most frequently with a single figure. At most he could place two figures in this very narrow field. Now the scenes that the epic poetry supplied to the artist usually placed in the scene several persons at the same time. It is noteworthy that in these conditions the dactyliographs only borrowed very rarely from this repertory. Yet they have interpreted some of these fables. On a very ancient intaglio that came from Cyprus, and which bears an inscription in Cypriote characters, there are even three personages, the Minotaur, Theseus plunging his sword into its belly, and behind him Ariadne who seems to hold a [illegible] in her hand (Fig. 39). It is again the Cretan myth that has

standing, with one foot placed on a rock (Pl. III, 9). Other intaglios date only from the first years of the 5 th century and represent Hercules in varied attitudes, which the engraver seems to have chosen especially to exhibit his talent in drawing the nude male body.[4]

Note 3.p.30. Furtwängler. Pl. VI, 55.

Note 4.p.30. The same. Pl. IX, 2. See Histoire de l'Art. Vol. VIII, p. 273-274.

Note 1.p.31. The same. Pl. VIII, 3.

Note 2.p.31. The same. Pl. VIII, 40.

Note 3.p.31. The Same. Pl. VIII, 9.

Note 4.p.31. The same. Pl. VIII, 39, 54; Pl. X, 4.

The winged and flying Nike that we have seen originate at D Delos appears on many stones, that are the product of an already advanced art;[5] but one type that one is more surprised to meet in this series is that of this Eros, whose images would be so greatly multiplied in the art of the 5 th century. One cannot refuse to recognize it in a winged genius, that holds a crown in one hand and a lyre in the other and soars through space (Fig. 37). It is him again on a Cypriote scarab, that carries off in the air a young girl clasped in his arms (Fig. 38). This is a seal that Sappho might have ordered for her personal use from some engraver of Lesbos.

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furnished the group of Europa carried off by the bull.[1] Castor and Pollux are recognized in two nude young men facing each o other. Each has a hand placed on an amphora (Pl. III, 4). Perhaps it is necessary to see a Ganymede in a nude young man, seen in profile and with legs far apart and the right knee on the ground. On the left arm extended forward, he holds a cock that seems to beat his wings. With the right hand thrown backward, he holds a crook. Behind him his dog is running. (Pl.I,20).

Note 1.p.32. Furtwängler. Pl. VI, 63; VIII, 5.

The heros of the Troban war are shown on intaglios, that mostly belong to the end of the archaic period. Seated on a rock, as he looked on the sea during his captivity in the island of Calypso, Ulysses is characterized by a pileus or pointed cap.. (Pl. I, 19). Another intaglio alludes to an adventure of the hero that has often served as a theme for the painters of vases; it shows him concealed beneath the belly of a ram. A beautiful scarab appears to represent Philoctetes at Lemnos (Pl. III, 18). The hero is entirely nude and bearded, standing surrounded by foliage. One hand rests on a staff and he extends the other with a gesture of anguish, his eyes are fixed on a young man who crouches before him and takes hold of his foot to dress his wound. Here on another intaglio, whose execution is also very careful, Eneas bears his father Anchises (Pl. I, 14). Eneas with one knee on the ground rests one hand on his spear that aids him to rise; he has his shield on the left arm,, and is represented at the moment when he has just taken his f father on his shoulder; he is beardless and entirely nude. Anchises is bald; he has the emaciated features of an old man and a long beard; the chlamys covers his shoulders, he carries in one hand a sort of casket. One can perhaps give the name of Teucer to a kneeling archer, which was certainly one of the m most precious pieces of the Collection of Pauvert de la Chapelle, that the liberality of the owner caused to enter the cabinet of antiques of the National Library.[1] The arches is beardless with one knee on the ground, covered by a helmet with a point and a cover for the nape. His quiver hangs at his side. Before him is his bow. He holds an arrow in both hands that he seems to straighten. The body seems covered by a sort of tight clothing with rings on pins (Pl. I, 25).

Note 1.p.33. Collection Pauvert de la Chapelle. Intaglios

and cameos given to the department of medals and antiques of the Bibliotheque nationale; Catalogue edited by E. Babelon. 1899. One can recommena to all persons of taste the reading of the vivid and intelligent Notice, that M. Babelon has placed at the head of his Catalogue. It contains curious details concerning the person of M. Pauvert de la Chapelte and the manner in which his collection was formed.

Perhaps we should have dispensed witn seeking a name for that archer. A number of images of tne same kind appear to have been engraved on seals only for themselves, for tne pleasure found in seeing presented in tne attitude accenting tne forms and c contours of this human body, that was then and will always remain the theme of excellence for sculpture. There is a pose f for which archaic art had a marked preference, that in which one of tne two legs is bent under tne torso, while the other is thrown forward and bent at tne knee.[2] Thus is obtained a h happy balancing of lines, wnich gives the impression of strength in repose. Sometimes this attitude seems required by the o occupation to which tne personage devotes himself, as in the case of tne archer that bends his bow, or in that of a young man who looks intently at a rod or perhaps a plumb line held in his right hand (Pl. III, 23); but most frequently the engraver has not taken the trouble to give a motive for tne pose. He is satisfied to place in the hand of the kneeling person a cup, flower or a lyre.[3]

Note 2.p.33. This is the pose of certain figures on the treasury of Cnidos of Delphi (Histoire de l'Art. Vol. VIII, Fig. 162). Likewise at the treasury of Megara at Olympia. (The same. Fig. 231).

Note 3.p.33. Furtwängler. Pl. VIII, 19, 25.

A type that surprises us at first sight because not found in this series, is that called the archaic Apollo, of the Apollos of Orchomene, There and Tenea.[4] Reflection explains the absence of thise images. When tne engravers were wearied by repeating to satiety on their seals the figures of animals, and then complex figures of monsters and of the genii of oriental origin, tne nour was past for tnese cold phantoms with arms fixed to tne body and legs close together. Men desired more and better. They already aspired to snow the male body in free and varied poses, in all the energy and warmth of movement. Thus we cannot

be surprised to find on several of these intaglios motives, t that recall certain modes taken by statuary in the second half of the 6 th century and the first years of the 5 th. Here is a hoplite covered by his armor, like the Aristion of the stele of Velanidezza,(Fig. 40).[1] There the ephebe is nude. Like the spear held in the hand on the reliefs of the Attic steles,[2] is the helmet covering the young man and the shielf suspended from his left arm, which recall his role as a soldier (Fig. 41). Elsewhere he is seen occupied, on his calves the greaves of metal (Fig. 42). Here is a warrior in flight. He is nude and is covered by a round helmet with crest. He protects his flight by his great round shield, and he holsd by the middle of the blade a sort of long scimetar (Pl. I, 18). It is again the memory of war recalled by an archer standing and bending his bow,[3] and a wounded man thrown on the ground, that makes an effort to rise and fight again.[4] Many seals allude to the pleasures of the chase. An ephebe holds a hare placed on his extended arm.[5] Another leans on his staff and plays with his dom (Fig. 43). We know this motive already by two beautiful Attic steles.[6] With helmet on head and shield on arm, a rider pursues a wild beast that seems to be a wild boar (Pl. III, 26).

Note 4.p.33. Histoire de l'Art. Vol. VIII. Figs.133,188,260.

Note 1.p.34. The same. Fig. 72.

Note 2.p.34. The same. Fig. 343.

Note 3.p.34. Furtwängler. Pl. IX, 3.

Note 4.p.34. The same. Pl. LXIII,4. See Histoire de l'Art. Vol. VIII, Figs. 175, 177, 231.

Note 5.p.34. The same. Pl. IX, 6.

Note 6.p.34. Histoire de l'Art. Vol. VIII. Figs.73, 158.

Other intaglios aim at the exercises of the gymnasium. On one of them is an ephebe, who to remove from his skin the dust and sweat, scrapes the lower part of his leg with the strigil. (Fig. 44). This is a motive which will serve as a pretext for the sculpture of the 5 th century to diversify its statues of athletes. On other seals is seen the strigil in the hands of gymnasts or near them, then the flasks of oil, the ball and discus, and all the implements of the palestra.[1]

Note 1.p.35. Furtwängler. Pl. VII, 61; VIII, 50,53; IX, 6.

The sons of the better families served in the cavalry. For this reason they are sometimes re

[illegible]
(Pl. III, 21) and the others in profile.[4]

[illegible]

Note 3.p.35. Furtwängler. Pl. VIII, 62,63,64; IX, 13, 15.

[illegible]

er hand, even at the beginning of the 5 th century, they did not yet seek its themes of female nudity. The sole image of this kind that we find to cite is that of a woman, who crouch- [illegible] once; this is to pour over her body what she collects at the [illegible] ich the ceramic painters loved to draw on their vases.[5]

Note 5.p.35. See all the Kores of the Acropolis (Histoire de l'Art. Vol. VIII).

Note 6.p.35. Histoire de l'Art. Vol. VIII, Figs. 8.-38.

A number of intaglios represent detached heads, especially the heads of helmeted warriors. Some are bearded (Pl. III, 5); some are beardless (Pl. III, 11). Here is one without the helmet, which is notable for the singular elongation of the skull (Pl. III, 15, 17; scarab). There are also masks of odd appear- [illegible]

this reason they are sometimes represented on seals, as on the Attic steles riding at a walk or a gallop,[2] sometimes alighting from their mount or walking beside it.[3] Almost a masterpiece is a scarab that was one of the jewels of the Collection Tyskevicz (Fig. 19). A nude young man supporting himself on the ground with his left leg thrown forward, restrains with the reins a horse that seeks to rear. These scenes of equestrian life are complicated by representations of quadrigas, some seen in front, (Pl. III, 21) and the others in profile.[4]

Note 2.p.35. Histoire de l'Art. Vol. VIII, Figs. 51, 388; Die attische Grabsteine, Pls. I, IX, X, XI.

Note 3.p.35. Furtwängler. Pl. VIII, 62,63,64; IX, 13, 15.

Note 4.p.35. The same. Pl. IX, 10; VIII, 55.

Female figures are very rare here; they are barely represented by some images of goddesses. Not without some surprise loes one verify the absence of a type, whose examples have been multiplied by sculptors and coroplaths, that of the woman in festal garments who brings her offering to the temple.[5] On the other hand, even at the beginning of the 5 th century, they did not yet seek its themis of female nudity. The sole image of t this kind that we find to cite is that of a woman, who crouches before a fountain and leans over to fill her urn. She is n nude; this is to pour over her body what she collects of the water escaping from a lion's mouth (Fig. 45). The idea of this subject might be suggested by one of those bathing scenes, which the ceramic painters loved to draw on their vases.[6]

Note 5.p.35. See all the Kores of the Acropolis (Historie de l'Art. Vol. VIII).

Note 6.p.35. Historie de l'Art. Vol. VIII, Figs. 3.-38.

A number of intaglios represent detached heads, especially the heads of helmeted warriors. Some are bearded (Pl. III, 5); some are beardless (Pl. III, 11). Here is one without the helmet, which is notable for the singular elongation of the skull (Pl. III, 15, 17; scarab). There are laso masks of odd appearance with great round eyes, wide mouth open to show the teeth.[1] Were not these masks of demons?

Note 1.p.36. Furtwängler. Pl. VIII, 61.

At the beginning of the archaic age, rare are rings with solid bezel on which the image is engraved on the same metal of which

[illegible] an arrangement differing from that on the Mycenaean rings of [illegible] of the king.

Note 2.p.8.- Histoire de l'Art. Vol. VI, Figs. 420, 421.

[illegible] which he is the son and in whose arms he seeks refuge. On a vase also found in an Etruscan tomb, this subject is treated in nearly the same fashion as on the ring (Fig. 47). The sole difference is that in the painting a griffin is behind Apollo. [illegible] are in quite similar attitudes. On both is the same form of c[illegible] lected in the cemeteries of Vulci and of Caere.

There has not been found in Greece and Ionia a single one of [illegible]

is made the ring; toward the beginning of the 6 th century, t they become more common; but the tablet of the bezel presents an arrangement differing from that on the Mycenaean rings of the same kind. There the oval field of the ring has its major axis parallel to the length of the finger.[2] Here on the contrary, this axis is perpendicular to the same length. The form of this tablet recalls Egypt. It is that of a cartouche with rounded angles on which the scribes inscribe the name and titles of the king.

Note 2.p.3.. Histoire de l'Art. Vol. VI, Figs. 420, 421.

All those rings with a metal bezel came from Etruria; but l like the painted vases contained in the sepulchres of that country, they are of Greek workmanship. The choice of themes suffices to indicate this. On the tablet of a gold ring is seen Apollo mounted ona chariot drawn by two winged horses (Fig. 46). Leaning forward, he discharges his arrows against Tityos. The giant flees, his side already pierced by two arrows. Before him is a figure of a woman. This is the goddess Gea, the land of which he is the son and in whose arms he seeks refuge. On a vase also found in an Etruscan tomb, this subject is treated in nearly the same fashion as on the ring (Fig. 47). The sole difference is that in the painting a griffin is behind Apollo. Nothing similar on the bezel, the engraver has not found space for that detail. The personages are nearly the same there and are in quite similar attitudes. On both is the same form of c chariot and of wings; the same dog running between the legs of the horses. One has the impression that the two objects, the vase and the ring, left adjacent workshops, from the same centre of art workers. In regard to this has been proposed a hypothesis confirmed by the study of the products of ceramics collected in the cemeteries of Vulci and of Caere.

There has not been found in Greece and Ionia a single one of those rings with the engraving executed on the metal of the bezel. What predominates on these intaglios on gold and silver is the supernatural and fanciful element. By their character the images noted recall the figures that Tuscan art has distributed everywhere in works that bear the proper mark of its i ideas and of its taste. It has been stated, that Greek workmen were established in small groups in the principal cities of Et-

Etruria. They had continued to speak their favorite dialect, a-
and their hands had retained their processes of execution; but
at the same time, they were preoccupied in presenting to their
rich patrons types familiar to their eyes. In the entire first
half of the 6 th century, the Phocaeans must have been in the
first rank of these foreign artisans. Of all Ionians, they un-
dertook the boldest voyages toward the West. They opened Spain
and founded Massilia. A little later, they sought to fix them-
selves in Corsica. They were driven from thence by the coalit-
ion of the Etruscans and Carthaginians; but they were happier
in southern Italy. They gave birth to that city of Velia, known
for the beauty of its silver coins.[1]

Note 1.p.37. Furtwängler. Vol. III, p. 89-90.

A curious phenomenon, that we must note here in passing, with-
out stopping to furnish its proofs, is the influence that from
this epoch Greek art begins to exert on the Phoenician engravers.[2]
Inasmuch as that art is enlivened by a life sufficiently intense
to make its influence felt by those, that had at first been im-
itative and docile pupils. By a sort of reaction, it already
imposes on them in a certain measure the imitation of its style
and its types; thus it prepares its final triumph, those succe-
ssively conquering more of it in our land after the 4 th century,
the art of all civilized humanity.

Note 2.p.37. Furtwängler. Vol. III, p. 108-115.

It is in regard to the figurines in terra cotta that one has
noted the moment, when tends to be manifested in the domain of
fine arts reaction of Hellenic genius;[1] but it is no less mark-
ed and is produced at the same time in the domain of intaglio-
ing and of glyptics. To speak at present only of these, many
very visible traces of these contacts and of this action are
found in intaglios, certainly executed by Phoenician workers,
most of which come from Cyprus, others from the coasts of Syria,
and even a greater number from the tombs of Carthage, and par-
ticularly the cemeteries of Sardinia, where abound those scarab-
s, mostly cut in green jasper. We have already given many a
specimens of these engraved stones;[2] we cannot delay to return
to them, by minute analysis. The historians of glyptics had
sought to limit the analogies presented by the Greek series
to the Phoenician series, certain types that passed thus from

Etruria. They had continued to treat their favorite themes, a and their hands had retained their processes of execution; but at the same time, they were preoccupied in presenting to their rich patrons forms familiar to their eyes. In the entire first half of the 6 th century, the Phoceans must have been in the first rank of those foreign artisans. Of all Ionians, they then pushed the boldest points toward the West. They opened Spain and founded Massilia. A little later, they sought to fix themselves in Corsica. They were driven from thence by the coalition of the Etruscans and Carthaginians; but they were happier in southern Italy. They gave birth to that city of Velia, known for the beauty of its silver coins.[1]

Note 1.p.37. Furtwängler. Vol. III, p. 89-90.

A curious phenomenon, that we must note here in passing, without stopping to furnish its proofs, is the influence that from this epoch Greek art began to exert on the Phoenician engravers.[2] Thenceforth that art is animated by a life sufficiently intense to make its influence felt by those, that had at first been attentive and docile pupils. By a sort of reaction, it already imposed on them in a certain measure the imitation of its style and its types; thus it preludes its final triumph, those successive conquests made of it in our West after the 4 th century, the art of all civilized humanity.

Note 2.p.37. Furtwängler. Vol. III, p. 108-115.

It is in regard to the figurines in terra cotta that has been noted the moment, when tends to be manifested in the domain of form this reaction of Hellenic genius;[1] but it is no less marked and is produced at the same time on the ground of numismatics and of glyptics. To speak at present only of these, many very visible traces of these contacts and of this action are found in intaglios, certainly executed by Phoenician workmen, some of whom came from Cyprus, others from the coasts of Syria, and even a greater number from the tombs of Carthage, and particularly the cemeteries of Sardinia, where abound those scarabs, mostly cut in green jasper. We have already given many s specimens of these engraved stones;[2] we cannot delay to return to them. By private analysis, the historian of glyptics has brought to light the analogies presented by the Greek series to the Phoenician series, certain types that Greece took from

oriental art, to return them modified, refined and ennobled. For example, this comparison has established for the Egypto-Phoenician type of the god Bes, that corpulent and almost ridiculously bestial dwarf with projecting eyes, flat nosed and thick lipped, from which hangs a grea. tongue. With his thick arms and short legs, with the relief of his enormous rump, the personage has an appearance no less strange when seen from the back as when seen from the front.[3] It seems that when Greek art still had to seek its means of expression, that it borrowed f from the figure of Bes certain traits, that served it to create and characterize the type of Hercules, that of Silenus and also perhaps that of the Gorgon; but later when in Greece the efforts of several generations of artists had defined the type of Hercules and had given him a certain beauty, he was seen to approach the type of the Phoenician Bes. He rose on his legs, which in the most ancient images seemed unable to support the burden of his massive torso.[1] He likewise became a conqueror of monsters. He held the lion by the throat or carried him panting and conquered on his broad shoulders.[2] The type of the same also insinuated itself into that oriental glyptics. It m made its place beside that from which it had issued in former times, according to all appearance. Here is a scarab that came from Tharros in Sardinia (Fig. 48). The Gorgon there with nude bust holds in its two hands a mask of Bes.

Note 1.p.38. Heuzey. Catalogue des figurines antiques de terre cuite du musee du Louvre. 1882. p. 82-86. This learned man first used the words:- "shock of return, reaction," that have since become in current use in the language of archaeologists.

Note 2.p.38. Histoire de l'Art. vol. III,Figs.423,424,428,4 441-443, 447, 476.

Note 3.p.38. The same. Vol. I, Figs. 534-536; Vol. III, Figs. 279, 294, 418.

Note 1.p.39. The same. Vol. III, Figs. 21, 22.

Note 2.p.39. The same. Figs. 295-298.

It would be easy to cite many other examples of these borrowings. There is the form of the Greek Triton given to the fish deity adored for centuries in Syria. This is a marine god that appears to be a counterfeit of the Hellenic Poseidon. There is the very frequent use of the entirely conventional attitude t

that artists are employed seems too limited to represent the death of the [illegible]. In many of these intaglios the field is filled by one of these masks, or by one of those isolated heads, that Greek engravers loved to place on their seals. From all these imitations we divine, that [illegible] in Phoenician workshops in Carthage as in Cyprus, men did not hesitate to confess the superiority of Grecian art and to copy its models. Further, these imitations cannot deceive the eye of a connoisseur. The execution always has a certain dryness and coldness, even in pieces where the work is most careful.

On the contrary among the Greeks, the desire to render to nature and to furnish a faithful transcript of it is already apparent in the work [illegible] intaglios; but the efforts it [illegible] interesting there by the [illegible] shown than by the happy success in execution. Thus to indicate where the divisions of the straight external muscles of the abdomen, it is necessary to make on the abdomen three parallel circles (Pl. I, [illegible]), or sometimes leave there the exact rendering of that region of the body. This later stroke in the [illegible] more completed [illegible]. The white line is very clearly marked, and the double swelling formed by the flesh between the [illegible], of the two sides of this vertical groove, are represented by three or four balls cut from the roll (Pl. I, 6). Doubtless there is something conventional in this procedure of rendering; but at least one divines there the firm intention to reproduce with sincerity the characteristic traits of the model. This is what one also feels in the drawing of the rest of the person, and especially of the members. These were at first figured in only a quite summary and [illegible] fashion; but as the artist became more skilful, he endeavored to give enough vigor and accent to the contour, that one could distinguish there the relief of the principal muscles. Besides, even where the tool is more skilful, there is always some hardness in these indications. The engraver is constrained by the narrowness of the field to simplify the drawing of his figure, that it is difficult for him to recall those [illegible] by which in nature are connected together the different planes, that are superimposed and intersect in the covering of the skeleton. To obtain the desired effect, he accents, exaggerates and underlines. The [illegible] engravers have in the [illegible] of his works something of that

that archaic art employed among the Ionians to represent the dash of the race. On many nf these intaglios the field is filled by one of these masks, or by one of those isolated heads, that Greek engravers loved to place on their seals. From all these imitations we divine, that henceforth in Phoenician workshops in Sardinia as in Syria, men did not hesitate to confess the superiority of Grecian art and to copy its motives. Further, these imitations cannot deceive the eye of an connoisseur. The execution always has a certain dryness and coldness, even in pieces where the work is most careful.

On the contrary among the Greeks, the desire to refer to nature and to furnish a faithful transcript of it is already announced in the most ancient intaglios; but the effort is more interesting there by the aims shown than by the happy success in execution. Thus to indicate there the divisions of the brawny mass of the straight external muscles of the abdomen, it is necessary to make on the abdomen three parallel ridges (Pl. I, 18, 24), or sometimes leave vague the entire modeling of that region of the body. That later became on the image more conformed to reality. The white line is very clearly marked, and the double swelling formed by the flesh between the aponeuroses, of the two sides of this vertical groove, are represented by three or four balls cut from the roll (Pl. I, 8). Doubtless there is something conventional in this procedure of rendering; but at least one divines there the firm intention to reproduce with sincerity the characteristic traits of the model. This is what one also feels in the drawing of the rest of the person, and especially of the members. Those were at first figured in only a quite summary and perhaps schematic fashion; but as the artist became more skilful, he endeavored to give enough vigor and accent to the contour, that one could distinguish there t the relief of the principal muscles. Besides, even where the tool is most skilful, there is always some hardness in thise indications. The engraver is constrained by the narrowness of the field to simplify the drawing of his figure, that it is difficult for him to recall those feats by which in nature are connected together the different planes, that are superimposed and intersect in the covering of the skeleton. To obtain the desired effect, he accents, emphasizes and underlines. The muscles sometimes have in the best of his works something of that

hardness, that we have mentioned in certain reliefs of the treasury of Cnidos;[1] this is the case in the Hercules racing in the Collection Luynes (Pl. I, 20). It would also be easy to note in even the pieces in which the art appears most advanced, certain faults in drawing, whose example was given to the engraver by contemporarâneous statuary until the eve of the Median wars. This is the front eye in the profile head, a detail only possible to verify on the originals; the bust that develops in its full breadth above the thighs seen from the side (Pl. I,20); for the lower members a slight lack of accord in the manner in which are presented the two legs.

Note 1.p.40. Histoire de l'Art. Vol. VIII, p. 378.

For example, here is a curious intaglio in which these defects are very apparent. (Pl. I, 24). It represents a warrior, which with his left arm covers himself with a wide round shield. The right hand holds a long spear. In the field is a long spear behind the warrior, under this is a crown, the head and body of the person are modeled with much accuracy and certainty, b but the legs are arranged in such a straoge fashion, that one asks what is the movement that the engraver desired to represent? It has been proposed to see there a combatant extended on earth, who pulls from his side the javelin that wounded him:[2] but a soldier lying on the ground would thus make such a great deviation with one leg extended to the left and the other bent to the right. We should rather see there a hazardous variation, an exaggeration of the attitude by which archaic art sought to indicate the dash of a rapid race (Pl. I,20). Here to better indicate his intention, instead of bending the lek backward, the artist has extended it horizontally. In his desire to attain expression, he has forced the effect.

Note 2.p.40. This intaglio is described thus in the manuscript inventory of the Cabinet.

As much as to the beauty of the nude form, the engraver is sensitive to that of movement; but he does not imitate the boldness of the Mycenaean engraver. The latter played with the difficulty, as it is said. Without worrying about the chances of failure, he first attempted to render the most violent movements, and at the cost of numerous inaccuracies, he had very happy successes in order of attempts. The engraver of the 6 th

[illegible]

riding horse (Fig. 19). The body is presented in front, sidewi-
se and even sometimes the back, in what appears to be the image
[illegible]
even foreshortens but not without awkwardness. See this nude
[illegible]

In representing the drapery is the same progress. The folds
of the fabric were at first indicated only by some lines of ex-
[illegible]
from the second half of the 6 th century, these folds have the
same refinement as on the reliefs of the treasury of Cnidos.
The lightness of the linen tunic is very well rendered, for
[illegible]
veil (Fig. 25). As for the hair and beard, the locks of which
were at first rendered only by parallel lines or by a string
of beads, as on certain very ancient heads; but on the less
archaic seals, the hair is divided into curls, that extend ar-
ound the brow and on the nape with entire freedom (Fig. 35).

At the close of this study there remains but one question to
be examined. Where in Greece after the 7 th century were prod-
uced this renaissance and this florescence of glyptics, to w
which are due the intaglios that we have just studied? All in-
vites us to turn our eyes to Ionia. The historical texts, the
[illegible]
inscriptions read there, all concur in suggesting the idea,
[illegible]
of a vanished art and the rapid flight that it took. Certain
traits in the works dating from the first revival of this art
are explained by the persistence of the traditions of Mycenaean
skill. It is verified that these were preserved longer in Ionia

century proceeds differently. At the beginning he contents himself with a very small number of attitudes that he long exerted himself to reproduce. Thus there is one for which he has a very marked preference. This is that of kneeling, which lends itself better than any other to fill the field of the seal. He gradually becomes bolder and diversifies the movements. The m most lively, like that of Hercules in combat with the lion of Nemea, does not frighten his graver (Pl. I,21). He seeks thus to amuse the eye by their novelty, such as that of the same was occupied in fastening his sandal (Fig. 49), and that of t the young man all whose strength is spent in restraining a rearing horse (Fig. 19). The body is presented in front, sidewise and even sometimes the back, in what appears to be the image of a disk-thrower (vignette at end of the Chapter). The artist even foreshrtens but not without awkwardness. See this nude man crouching, whose two bent legs face the spectator (Fig.50).

In representing the drapery is the same progress. The folds of the fabric were at first indicated only by some lines of entirely geometrical regularity; but on intaglios that must date from the second half of the 6 th century, those folds have the same refinement as on the reliefs of the treasury of Cnidos. The lightness of the linen tunic is very well rendered, for one that divines the forms of the body under this transparent veil (Fig. 25). As for the hair and beard, the locks of which were at first rendered only by parallel lines or by a string of beads, as on certain very ancient heads; but on the less archaic seals, the hair is divided into curls, that extend around the brow and on the nape with entire freedom (Fig. 33).

At the close of this study there remains but one question to be examined. Where in Greece after the 7 th century were produced this renaissance and this florescence of glyptics, to w which are due the intaglios that we have just studied? All invites us to turn our eyes to Ionia. The historical texts, the style of the intaglios, the dialect in which are written the inscriptions read there, all concurs in suggesting the idea, that Ionian artists played the chief part in this restoration of a vanished art and the rapid flight that it took. Certain traits in the works dating from the first revival of this art are explained by the persistence of the traditions of Mycenaean skill. It is verified that these were preserved longer in Ionia

that is the part of Greece. The intaglios on which is believed [illegible] in fact the work [illegible] of this survival mostly came from one of the islands of the Aegean sea, which at that epoch were subject to all the influences of the brilliant Ionian civilization. We know from [illegible] that Theodor[illegible] of Samos, [illegible] and the [illegible] in the archaic age [illegible], whose name is known to us by historical evidence. The Ionian alphabet with its local varieties is recognised in the greater number of the signatures of artists or of owners that mark some of those intaglios. In many figures is believed to be found something of the elegance and [illegible], that early characterise the works of Ionian statuary. There is even a certain detail [illegible] the mark of its origin. Thus on one of the most beautiful intaglios of this series ([illegible]), the [illegible] lotus flowers as ornaments; [illegible] that is a motive whose use is familiar to the Ionian decorator. He has employed it on painted vases, on the sarcophagi-
es of Clazomene, on metal overlays and elsewhere.

According to all probability, from workshops founded in Asian Greece and in the adjacent islands came the first engraved stones in the 7 th century and the first half of the 6 th; then [illegible] the use of these seals and [illegible], Ionian [illegible] and [illegible] themselves nearly everywhere in European Greece, and even in the distant [illegible]; they carried with them their tools and processes. What could not fail even to accelerate this exodus was the Persian invasion, and a little later the great disasters following the first revolt of Ionia. Among the intaglios reproduced here, whose execution is [illegible], more than one could have been executed at Corinth, Sicyon or Argos, Athens or Egina, in any city where [illegible] with [illegible] to imitate [illegible]; but in the domain of art as in that of pure thought, of history, science and philosophical speculation, the Ionians had given the impulse. The European Greeks had long delayed, [illegible] and examples. [illegible] protected than Asian Greece from the enterprises of oriental [illegible], after the [illegible] of Ionia, they could continue to proceed with firm and sure pace in the paths opened to them

than in the rest of Greece. The intaglios on which is believed to be found the most vivid trace of of this survival mostly c came from one of the islands of the Egean sea, which at that epoch were subject to all the enfluences of the brilliant Ionian civilization. We know from an assured soucce that Theodoros of Samos, that bold innovator, was pleased with the work on hard stones, and the sole engraver in the archaic age was another Samian, Mesarchos, whose name is known to us by historical evidence. The Ionian alphabet with its local varieties is recognized in the greater number of the signatures of artists or of owners that wore some of those intaglios. In many figures is believed to be found something of the elegance and suppleness, that early characterize the works of Ionian statuary. There is even a certain detail bearing the mark of its origin. Thus on one of the most beautiful intaglios of this series (Fig. 19), the harness of the horse has lotus flowers as ornaments; now that is a motive whose use is familiar to the Ionian decorator. He has lavished it on painted vases, on the sarcophaguses of Clazomene, on metal overlays and elsewhere.

According to all probability, from workshops founded in Asian Greece and in the adjacent islands came the first engraved stones in the 7 th century and the first half of the 6 th; then when the use of those seals had extended everywhere, Ionian w workmen seeking new patrons must establish themselves nearly everywhere in European Greece, and even in the distant colonies; they carried with them their tools and processes. What could not fail even to accelerate this exodus was the Persian invasion, and a little later the great disasters following the great revolt of Ionia. Among the intaglios reproduced here, whose e execution is freer, more than one could have been executed at Corinth, Sicyon or Argos, Athens or Egina, in any city where the works of statuary suggested to the engraver motives with a happy effect, furnishing him with models to imitate and reduce; but in the domain of art as in that of pure thought, of history, science and philosophical speculation, the Ionians had given the impulse. The European Greeks had long delayed, but profited by these lessons and examples. On a country better protected than Asian Greece from the enterprises of oriental conquerors, after the misfortunes of Ionia, they could continue to proceed with firm and sure pace in the paths opened to them

by the bold genius of those precursors and beginners.

Chapter XV. Numismatics.

General Theory of Grecian Money.

1. Invention of Coinage.

In treating of Lydia, we accepted the tradition attributing to the Lydian kings of the dynasty of Mermades the invention of coinage.[1] This tradition was guaranteed by a witness, whose authority it is difficult to reject, Xenophanes of Colophon.[2] He lived in the 6 th century in a country adjoining Lydia and even attached to it by bonds of vassalage. For the needs of commerce conducted with the cities of the coast, coins struck at Sardes must circulate in abundance even at Colophon and in all Ionia. Also Xenophanes interested himself greatly in all that concerned the past of his people. Before devoting himself to those philosophical speculations, that made him the first master of the celebrated school of Elaea, he had written a long poem on the founding of his native city, and on the competition that it had carried on with the colonial undertakings of the Phoceans. No one was better prepared to be accurately informed concerning the origin of an instrument of exchange, whose advantages had been so quickly seized on by the Greeks of the coast, because they hastened to appropriate the benefits. Xenophanes gave there a statement that must hold the first place. If he were born about 620 as believed, his father or at most his grandfather saw appear on the market the first ingots of pale gold on which a chief of State had placed his mark.

Note 1.p.44. Histoire de l'Art. Vol. V; Book VIII, Chap. II,2. On nearly every page of Chapters XV and XVI of Book XIII, we refer to two works that we have had constantly under our eyes while sketching this survey of the origin of the coinage of the Greek cities. First is the book of Francois Lenormant, unfortunately unfinished; La monnaie dans l'antiquite, lectures given at the National Library in 1875-1877. 1878-1879. Then is particularly a work in course of publication by our colleague, M. Babelon:- Traite des monnaies grecques et romaines. So far has appeared part first of Vol. I in 1901. Part II of vol. I, comprising Greek coins from the origin to the Median wars.1907. Vol. II, comprising coins of the empire and of the Persian Achamenides, of the Semitic Orient and of Asia Minor to the 5 th and 4 th centuries. 1910. Part III, Atlas of plates, 1to 85, 1907; 75 to 185, 1910. In these works will be found discussed

all the frequently complex and quite obscure problems, that appear to the historian. We cannot enter on these discussions. We must content ourselves to follow these very safe guides and state briefly from them the results, that seem to be the best acquired by the science of numismatics.

Note 2.p.44. Pollux. IX, 83.

Here agin is what Herodotus, another Asian Greek, wrote in the course of the following century:- "According to our knowledge, the Lydians were the first to make use of struck coins of gold and silver."[1] For a long tim was seen in that assertion of Herodotus only a pure and simple confirmation of the evidence of Xenophanes. Quite recently was proposed another interpretation of this text. The Lydian coins assigned to Gygas, Sadyattes and Alyattes are all made of that natural alloy, that the Greeks called white gold or electrum, later replaced by a coniage of pure gold and one of silver. Herodotus did not intend to state that the Lydians first succeeded in separating gold and silver, until then closely associated in the metal struck in coins.[2] Why he praised them was to have first known how to make coins of pure metal, gold and silver.

Note 1.p.45. Herodotus. I, 94.

Note 2.p.45. Six. Numasmatische Chronicle. 1890. p.210, Note 69.

The hypothesis is ingenious; but we fear that it errs by too much subtilty. We believe that Herodotus only wished to record a fact of public notoriety in all Asian Greece, the priority of invention that the historian had to credit to the Lydian m monarchy. The terms that he used, it cannot be denied, there appear to apply rather to the coinage of the last king of Sardis, rather than that of his predecessors; but from the time of Herodotus, men found in the markets of Ionia scarcely any of the old staters of pale gold of the first Mermnades. For Herodotus at the beginning of the 5 th century, what represented the Lydian coinage were the kind of gold and silver struck by Croesus. The reason is excellent. Circulated in great quantity, they must remain in circulation for many years after the Persian conquest in that satrapy of Asia Minor, which had Sardis as its capital. Herodotus was not a numismatist. He did not inquire concerning the rudimentary types by which the shops of preceded these Creseids, as they are called, which he saw were still so much sought in the entire Anatolian peninsula. He qu-

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and of Ephesus, they began to strike coins.

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reason to stop there. What must have given the sovereigns of
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people which they governed. By the exploitation of the quartz
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auriferous sands carried down by the rivers descending from a
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quantity of the precious metals. On the other hand, the frien-
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them to organize a regular caravan service, which came from t
the great industrial cities of the basin of the Euphrates to
Sardis, their capital. Now if the maritime commerce, for which
a return freight is necessary, needs a natural equivalent and
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transport animals, the owner of the caravan in purchasing for
the journey is interested in substituting a portable value of
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quite naturally thought of these Creseids, when he believed t that he should attribute to the Lydians the marvellous invention, of which they did not think, however rich and civilized they were, neither Egypt nor Chaldea. Between the pieces assigned to Gyges and those first struck in the great cities of Ionia, the resemblance is such, that it has been necessary to make a distinction, to trust to very slight indications. The same material, form, cut and appearance. All these pieces, to whatever mint they are referred, appear to date from the same time. This close resemblance has suggested a doubt, Men have asked, were not the true inventors the Ionians? Under the Mermnades, while the Lydians fought their neighbors in Ionia, they showed themselves very passionate admirers of the civilization and a arts of Greece. Perhaps in imitation of the Greeks of Miletus and of Ephesus, they began to strike coins.

However specious that conjecture, we do not think there is reason to stop there. What must have given the sovereigns of Lydia the idea of thus placing on electrum blanks this impression, that like the seal of the king were both the natural conditions of the surroundings where their power was established, and the requirements of the commerce to which were devoted the people which they governed. By the exploitation of the quartz veins of Timolus and of Sipyge, as well as the washing of the auriferous sands carried down by the rivers descending from t the Phrygian plateau, those princes disposed of a considerable quantity of the precious metals. On the other hand, the friendly relations maintained with the Assyrian empire had allowed them to organize a regular caravan service, which came from t the great industrian cities of the basin of the Euphrates to Sardis, their capital. Now if the maritime commerce, for which a return freight is necessary, needs a natural equivalent and not a payment in specie, it is not the same for a continental commerce. "There all excess baggage requiring an addition of transport animals, the owner of the caravan in purchasing for the journey is interested in substituting a portable value of metal for merchandize, a cumbrous and heavy value."[1] For this purpose those caravan men must carry with them a quantity of those rings or bars of gold or of silver, which we see represented in Egyptian paintings;[2] but it is necessary to continually resort to the balance to ensure that those ingots have really

the weight assigned to them by local customs. It was an idea of genius to call the need of these estimates by stamping on the ingot a mark that should indicate and guarantee its value.[3]

Note 1.p.47. Radet. La Lydie et le monde grec au temps des Mermnades. p. 177. No one has studied Lydia better than Radet, or defined with such precision as he has done in this memoir, the part that this State and this people have played as inter-mediaries between the civilization of Asia of the Euphrates and Ionian Greece. Cf. the same in the Revue des Universities du midi, 1899, p. 118-121, le L'invention de la monnaie, Phidon d'Argos.

Note 2.p.47. Histoire de l'Art. Vol. V, Fig. 183.

Note 3.p.47. Aristotle has very well appreciated the advantage that an industrial and commercial people found by the invention of coins:- "Men agree to give and receive in exchange a material useful in itself, easily utilized in the usages of life. For example, this was iron, silver or some other analogous substance, whose dimensions and weight were at first determined, and then finally to remove the trouble of continual measurements, it was marked by a particular stamp, a sign of its value. (Politics. I, 9).

One asks why this idea, that seems to us very simple, had not come to the mind of some Egyptian or Chaldean monarch; but no one had it before the first years of the 7 th century. The existence and uses of the monuments [illegible] demonstrating this. If this be so, there is no reason to question the agreeing statements of Xenophanes and of Herodotus. From the latter assures us that the Lydians were first of all men known to him to strike coins, he adds that "they were the first kapeloi."[4] What precise meaning did he give to that word? This subject has been much discussed; but what is certain is, that by the use of this term, the historian intended to affirm that this people made proof of very special aptitude for a certain kind of commerce, distinguished by certain characteristic traits from the commerce long earlier practised by the Phoenicians for several centuries on all the coasts of the Mediterranean.[5] Evidently, also in his mind was the difference between the merchants like the Phoenicians and those designated as [illegible] that the latter [illegible] to the former, [illegible] to accumulate [illegible].

the weight assigned to them by local customs. It was an idea of genius to omit the need of these weighings by stamping on the ingot a mark that should indicate and guarantee the value.[3]

Note 1.p.47. Radet. La Lydie et le monde grec au temps des Mernades. p. 157. No one has studied Lydia better than Radet, or defined with such precision as he has done in this Memoir, the part that this State and this people have played as intermediaries between the civilization of Asia of the Euphrates a and Ionian Greece. By the same in the Revue des universities du midi, 189 , p. 118-121, is L'invention de la monnaie, Phidon d'Argos.

Note 2.p.47. Histoire de l'Art. Vol. V, Fig. 156.

Note 3.p.47. Aristotle has very well appreciated the advantage that an industrial and commercial people found by the invention of coins:- "Men agree to give and receive in exchange a material useful in itself, easily utilized in the usages of life. For example, this was iron, silver or some other analogous substance, whose dimensions and weight were at first determined, and then finally to remove the trouble of continual measurements, it was marked by a particular stamp, a sign of its value. (Politics. I, 6).

One asks why this idea, that seems to us very simple, had not come to the mind of some Egyptian or Chaldean monarch; but no one had it before the first years of the 7 th century. The evidence and that of the monuments concur in demonstrating this. If this be so, there is no reason to question the agreeing statements of Xenophanes and of Herodotus. When the latter assures us that the Lydians were first of all men known to him to strike coins, he adds that "they wore the first chapeloi."[4] What precise meaning did he give to that word? This subject h has been much discussed; but what is certain is, that by the use of this term, the historian intended to affirm that this people made proof of very special aptitude for a certain kind of commerce, distinguished by certain characteristic traits f from the commerce by barter practised by the Phoenicians for several centuries on all the coasts of the Miditerranean.[5] the Apparently, what in his mind made the difference between the merchants like the Phoenicians and those designated as chapeloi was, that the latter inversely to the former, employed money to accelerate and simplify the operations of their traffic.

Note 4.p.47. Herodotus. I, 94.

Note 5.p.47. Herodotus has a very clear idea of the conditions in which were transacted Phoenician commerce; he indicates them in the beginning of his work. (I, 2).

In spite of their industrial and commercial activity, the Grecian cities of Ionia did not posses a mass of precious metals, that could be compared with that which the Lydian monarchs had at their command. It was not with them, but with These princes embarrassed by their wealth, that one must imagine the application to that purpose of a portion of the disposable capital. Further, if the needs of terrestrial commerce caused the attempts from which came money, these needs made themselves f felt at Sardis before being experienced at Ephesus or Miletus. The merchandize brought by caravans from the interior reached the coast only by traversing Lydia. After many weeks of travel, these trains broke bulk in the caravanserais of Sardis. There in accordance with the demands transmitted to them, the Lydian middlemen sent to one or another port of the coast a certain series of bales. Was it not in following this business that Pythios of Sardis gained the enormous fortune, which he hastened to place at the disposal of Xerxes to aid him in paying the expenses of the war? [1] Why further reject the evidence of the Greeks in this matter? Their national vanity is known to us. Why refuse to believe them on their word, when for once to to one of those people termed barbarous by them, they attribute the merit of one of those inventions, that make an epoch in the history of humanity? We can take them at their word. From Asia they borrowed the principle, the conception of money; but of what was at the origin only an economic expedient, they knew how to make it a work of art in brief time.[2] All that the Lydian coiner proposed was to stamp on a blank a mark to confer on it a definite value. Under the graver of the Greek coiners after a brief delay, this mark will become a condensed relief, Each city will place on its money a type peculiar to itself, that distinguishes it from the money of other cities. It will be necessary to vary these types infinitely, and the imagination of the engraver of coins will thus be incited to always find novelty by reason of the narrowness of the field, these artists that engrave on cornelian or jasper can only attain p precision oand refinement of modeling at the cost of an effort

[illegible] on that the contemporaneous sculpture and will follow its advance. In these conditions is there actually a reason for disputing with the Lydians the honor of a happy initiative, accorded to them by the Greek historians? In what concerns money as for many other borrowings of the same kind, the portion of the glory falling to the Greeks is yet the most beautiful. The last comers in the antique world, they have inherited from all [illegible] ed by them, sciences that they have sketched, various technics [illegible] them, they developed, fertilized, [illegible] perfection.

Note 1.p.48. Herodotus. VII, 27-28.

Note 2.p.48. *In a few words, André Michel has very well indicated what monetary art become in the hands of the Greeks; An art," says he, "whose field is so limited, and that must hold as in the hollow of the hand drops of the essence of life, of* [illegible]

The pale gold pieces of the first sovereigns, of Miletus and of Ephesus, had already circulated for some time in Ionia and the adjacent islands, when the European Greeks also desired to have their own money. They had not delayed to understand the services rendered by this new means of exchange. All evidences agree on this point, that Pheidon, king of Argos [illegible] desire. For this reason current tradition causes him to [illegible]
[illegible]
to whom it refers the invention of money in its local variations.[1] Pheidon invented nothing; but to his initiative were the first coins issued on the western shores of the Ægean sea.[2]
[illegible]
[illegible], that were struck in the island of Ægina;[3] which was dependent on Argolis. Those pieces with their type of very [illegible]
[illegible]
that of the electrum pieces of Gyges and of the first coinage of Miletus.[4] [illegible]
back to the 9 th century the reign of Pheidon, Herodotus is worthy of credence, and he places about the middle of the 7 th century the prince to whom his contemporaries have credited the [illegible]
weights and measures adopted in the entire Peloponnesus, [illegible]

regulated on that the contemporaneus sculpture and will follow its advance. In these conditions is there actually a reason for disputing with the Lydians the honor of a happy initiative, accorded to them by the Greek historians? In what concerns money as for many other borrowings of the same kind, the portion of the glory falling to the Greeks is yet the most beautiful. The last corners in the antique world, they have inherited from all labors accomplished by preceding civilizations, ideas conceived by them, sciences that they have sketched, various technics with procedures invented by them; but all that they received thus, they developed, fertilized, matured and even brought to perfection.

Note 1.p.48. Herodotus. VII, 27-29.

Note 2.p.48. In a few words, Andre Michel has very well indicated what monetray art became in the hands of the Greeks; "An art," says he, "whose field is so limited, and that must hold as in the hollow of the hand drops of the essence of life, of expression and of thought." (Jour. des Dabats.Jan.16.1909.

The pale gold pieces of the first Mermnades, of Miletus and of Ephesus, had already circulated for some time in Ionia and the adjacent islands, when the European Greeks also desired to have their own money. They had not delayed to undesstand the services rendered by this new means of exchange. All evidences agree on this point, that Phidon, king of Argos satisfied this desire. For this reason current tradition causes him to figure among the personages, some legendary and the others historical, to whom it refers the invention of money in its local variations.[1] Phidon invented nothing; but to his initiative were due the first coins issued on the western shores of the Egean sea.[2] These coins were pieces of silver with the effigy of the sea lentil, that were struck in the island of Egina;[3] which was t dependent on Argolis. Those pieces with their type of very bold relief represent a more advanced state of the monetary art than that of the electrum pieces of Gyges and of the first coinage of Miletus.[4] Besides of the chronicle of Paros even carries b back to the 9 th century the reign of Phidon, Herodotus is more worthy of credence, and he places about the middle of the 7 th century the prince to whom his contemporaries have credited t the establishment of the first complete and regular system of weights and measures adopted in the entire Peloponessus, a sys-

system according to which was necessarily [illegible]
[illegible]
[illegible]
[illegible]
name. In the distant past that he had in view, Argos was alre-
[illegible]
[illegible]

Here is then the conclusion that is imposed. In the century [illegible]
following the invention of the official coinage of the preci-
us metals, all Greek cities of some importance, metropolises
and colonies, [illegible]. It is the [illegible]
[illegible]

system according to which was necessarily calculated the size of the royal coinage.[1] The author of the Chronicle, to whom c can be imputed several other errors of the same kind, doubtless confused in one sole personage several Argive kings of the same name. In the distant past that he had in view, Argos was already the most powerful of the little States among which was divided the Peloponessus.

Note 2.p.49. Chronique de Paros, line 30. Strabo. VIII,3-33; 6-16.

Note 1.p.49. Pollux. IX, 83.

Note 3.p.49. Ephorus affirmed that those pieces came from t the mint of Egina.(Strabo. VIII. 6-16).

Note 4.p.49. Lenormant. La Monnaie dans l'antiquite. Vol. I. p. 132-136.

Note 1.p.50. Herodotus (Vi, 127), among the pretenders to t the hand of the daughter of Clisthenes, tyrant of Sicyon, mentions a son of Phidon. It was about the year 607 that Clisthenes commenced to govern Sicyon. According to Herodotus, Phidon must then have reigned at Argos in the second half of the 7 th century. The Phidon that Herodotus makes a contemporary of Clisthenes still is the same as he, who according to the author f followed by Pausanias (VI, 22-2), in the 8 th Olympiad (784 B.C) by force took from the Eleans the presidency of the Olympic games. This is the same violent intervention of a king of Argos, that Herodotus means in the curious passage in which he enumerates all the sons of the noble race ambitious of the honor of allying themselves with the powerful Orthagorides, when he adds in reference to Phidon to the words already quoted, these:- (Greek). There seems to be produced in the historians of the Hellenistic age regrettable confusions concerning the different successors of the Heraclide Temenos; perhaps in that family the name of Phidon was transmitted from father to son or reappeared at intervals. In the embarrassment caused to us by the contradictory assertions, Herodotus, nearer the events, is still the best guide to follow.

Here is then the conclusion that is imposed. In the century following the invention of the official coinage of the precious metals, all Greek cities of some importance, metropolises and colonies, began to strike coins. It is the business of the numismatist to arrange for each city the series of the pieces

[illegible]

[illegible]

ssion is the light cast on the starting point, the origins of

[illegible]

2. [illegible]

[illegible]

investigate here by what methods the civilizations of Egypt a

[illegible]

to their monetary ingots sometimes one and sometimes the other

of those systems, modifying them according to the special con-
venience and weight of the piece that served as a standard. It
is only by the name of art works, that coins have their places
marked in this history. The engraver of medals, as he is called

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not dispense with insisting on two points, before surveying t
the most curious and most beautiful works of the monetary art.

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our own. This is because the processes employed for making them
differ greatly from those in use today in our mints. The ques-
tion of the craft is too close to the question of art, for it
to be possible to separate them. When the necessary details of
this subject have been briefly given, we must collect and exp-

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numismatics. We shall have to use them too frequently, for it

[illegible]

The metals utilized in antiquity for coinage are the same

that it issued, following as far as possible the chronological order. As for us, all that we retain of his laborious investigation is the light cast on the starting point, the origins of the monetary art. For all these series, whatever diversity they present, there are only two beginnings of the lines, the e electrum money of the first Mermnades and of Miletus, and the silver money of Phidon; but when the latter opened his mint at Egina, he was only an imitator. Again have we verified a fact, whose proof was already supplied to us in other lands by the study of the monuments. In the domain of industry as in that of pure thought, Asian Greece has always been several generations in advance of European Greece.

2. Materials and Processes of Fabrication.

In spite of the interest presented by this study, we cannot investigate here by what methods the civilizations of Egypt a and of Chaldea supplied the absence of coined money, indicate the part played by the precious metals played in exchanges before the invention of money, define the two ponderous systems in use among Chaldeo-Assyrians, nor show how the Greeks applied to their monetary ingots sometimes one and sometimes the other of those systems, modifying them according to the special convenience and weight of the piece that served as a standard. It is only by the name of art works, that coins have their places marked in this history. The engraver of medals, as he is called today, for us is only an artist that applies to metal in very particular conditions the methods of sculpture. However we cannot dispense with insisting on two points, before surveying t the most curious and most beautiful works of the monetary art. By their form and appearance, antique coins differ much from our own. This is because the processes employed for making them differ greatly from those in use today in our mints. The question of the craft is too close to the question of art, for it to be possible to separate them. When the necessary details of this subject have been briefly given, we must collect and explain the terms by which the Greeks usually designated the divisions and subdivisions of their money. These terms, more or less literally transmitted, have passed into the language of numismatics. We shall have to use them too frequently, for it not to be important to define their meaning.

The metals utilized in antiquity for coinage are the same

which modern societies still devote to that purpose, gold, silver and copper. The ancients further used for that purpose another material, electrum, a natural or artificial allow of gold or silver. This was for them a fourth metal. There are from m many Greek cities like Cyzicus and Phocea, as well as in a different epoch from many royal dynasties of the Hellenistic world, series of pieces of electrum. The standard of that alloy is far from being fixed. It varies much from one series to another and sometimes in the same series. Certain coins of electrum are of nearly pure gold; they scarcely have more than 5 parts of silver to 85 of gold. On the contrary, in others the proportion is reversed and there is scarcely 5 per cent of gold. Between these two extremes are found all intermediate degrees. Sometimes gold and sometimes silver is in excess. Croesus substituted for the electrum coins of his predecessors coins of gold a and of silver, an example followed by the kings of Persia, when they issued their darics. As for the Greek cities of Asia Minor and of the adjacent islands, with rare exceptions, they also did not delay to renounce electrum pieces, to strike only silver. The cities of European Greece at first had commenced by striking silver. No Grecian city struck coins of gold during the period closed by the Median wars.

Thus silver forms the sole material of the coins to which o our study will be devoted. The gold coined by the kings of Lydia and of Persia, as by the Greeks and later by the Romans, is almost always pure or at least is deemed to be so. It was brought to the degree of purity that could be attained by the refining processes of the ancients. On the contrary in antiquity as in our days, coined silver has always contained a small quantity of copper. In the pure state the silver is too soft to serve for making pieces destined to pass from hand to hand; the wear would be too rapid. The proportion of alloy contained in antique coins is very variable. The silver of the coins of Athens that always had a well established reputation of a good standard was generally before Alexander 985&1000 fine. The staters of Egina and of Corinth gave about 961/1000 of silver; elsewhere in southern Italy and Sicily the proportion of silver falls to 910/1000. Fractional coins were among the Greeks and Romans supplied by an alloy of red copper mixed with a little tin or zinc. This alloy is what we call bronze. We distinguish

from copper both by its composition and its properties. The [illegible]
[illegible]
[illegible]
[illegible]
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hardness. It wears very slowly by friction and oxidizes only
[illegible]
[illegible]
seurs by the beauty of their tones.

Two procedures can be employed for the fabrication of coins:- to cast the fused metal in moulds of two pieces of refractory stone or terra cotta, or indeed to strike a blank or solid met- [illegible]
[illegible]
[illegible]
[illegible]
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industry still applies to metal blanks; but the mode of execut- [illegible]
powerful apparatus endowed that industry since the 17 th cent- [illegible]
then the hydraulic press and the coining press. They struck ve- [illegible]
[illegible]
cation; for it required several successive blows of the hammer to obtain the result now obtained with a single stroke of the [illegible]
has but a very slight relief.

According to an experienced master from whom I asked advice, [illegible]
respects differed from those in use in our time.[1] When an artist receives today the order for a coin or a medal, this is how he usually proceeds. He makes a model in clay with dimensions much larger than must be those of the piece to be struck. He casts this model in plaster and then transfers it to a [illegible]
relief. This reduction and transfer is made by the aid of a machine invented in the 16 th century, whose work is known

from copper both by its composition and its properties. The ancients had but one word, chalcos in Greek and aes in Latin, to designate both native copper and the various alloys formed by that metal as a base. The quantity of tin alloyed with copper in Greek coins is nearly the same as in industrial bronzes and in statuary. It varied between an eighth and a sixteenth of t the total weight. The metal thus obtained had a considerable hardness. It wears very slowly by friction and oxidizes only on the surface. This superficial change even becomes a quality. It produces those patinas, that often make the joy of connoisseurs by the beauty of their tones.

Two procedures can be employed for the fabrication of coins:- to cast the fused metal in moulds of two pieces of refractory stone or terra cotta, or indeed to strike a blank of solid metal between two dies in which are sunk in intaglio the image o and inscription that the piece must receive. This last process was the sole one employed in the country and in the course of the epoch, whose limits will not be passed in this study. Its principle was thenceforth the same as the treatment that modern industry still applies to metal blanks; but the mode of execution of the work is much changed. The ancients did not know the powerful apparatus endowing that industry since the 17 th century of our era, by the progress of mechanics, the balance press, then the hydraulic press and the coning press. They struck their coins with the hammer. Thus the striking was much slower and more imperfect. It frequently produced accidents in fabrication; for it required several successive blows of the hammer to obtain the result now obtained with a single stroke of the balance press, when this concerns our coins where the image has but a very slight relief.

According to an experienced master from whom I asked advice, the methods pursued by the engravers of antique coins in other respects differed from those in use in our time. [1] When an artist receives today the order for a coin or a medal, this is h how he usually proceeds. He makes a model in clay with dimensions much larger than must be those of the piece to be struck. He casts this model in plaster and then transfers it to a steel punch, reduced in the desired proportion, when the image is in relief. This reduction and transfer is made by the aid of a m machine invented in the 18 th century, whose work is known

under the name of the Collas process. It makes the transfer with perfect accuracy. Thus it renders to the medal engraver the service , which demands a practician to di it directly. T The work being thus reduced and carried sufficiently far, the engraver finishes it with the graver. His punch being completed, he uses it for obtaining the die, on which the engraving is an intaglio. When he devotes much care to his work, he revises his figure in the intaglio. The die is obtained by sinking the punch of hardened steel by a certain number of blows into a bit of soft steel. The die is annealed after each stroke of the balance press. There is a twofold advantage in following this procedure, preceding the die by the punch. The artist has his figure in relief on the punch. He sees it as it must appear on the medal; he thus has a better idea of the effect desired than by the intaglio. Further, if the die breaks under the stroke, which does not fail to occur, there remains the punch, ready to produce new dies.

Note 1.p.53. Conversation on Dec. 20, 1881, with Chaplain, medal engraver.

It does not seem that the Greek engraver undertook that method. Doubtless he also began by seeking his figure in a clay r relief; but he had no instrument permitting him to transfer it into metal mechanically. With his model under his eyes, he first attacked the die, and he modeled his image in intaglio. That is recognized by men of the trade by certain details and by t the entire character of the execution. Also the indirect confirmantio of the hypothesis is suggested by the nature of the work. We possess more than one antique coining die; but nothing has ever been found resembling a punch. Like the ancients, the medallists of the Renaissance were never compelled to engrave punches; they had only dies. What permitted them to simplify their operations thus, like the Greek engravers, was the decision and certainty of their graver and of their drill.

It is asked how the ancients obtained with no other tool than the hammer, pieces on which the image has the very strong relief that is presented on some coins, for example, on the great 10 drachme pieces of Syracuse, or on the 4 drachme coins of t the kings succeeding Alexander. To strike a medal today on which the image has such a bold projection, would require 12 to 15 strokes of the balance press, also taking the precaution to

anneal the blank after each blow of the press. Now that has a
[illegible]
[illegible]
what seems inexplicable at first sight. He believes that in
[illegible]
state. With his spoon the workman took from the crucible the
[illegible]
fluid on the reverse die, and before it had time to cool and
[illegible]
The strength of the human arm and the weight of the hammer suf-
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procedure thus employed belonged both to casting and striking,
[illegible]
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that the image owed to the violent blow of the hammer. What a
adds to the probability of this hypothesis is even the appear-
ance of the antique pieces, of clefts and crevices that are o
often noted on the circumference of the piece. These defects
[illegible]
the dies in haste to strike on the metal before it had resumed
all its resistance.

Men had previously formed a slightly different idea of the
[illegible]
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more was necessary to obtain a very clear stroke, when the
type of the piece to be struck did not have to present a very
[illegible]
that most frequently, to give the material of the blank the de-
sired ductility, men were satisfied to revive it in the heat
of a strong flame. The blanks had then been prepared in advance
in the form of metallic leases entirely ready to receive the
[illegible]
[illegible]
[illegible]
[illegible]
weight assigned to it by the monetary system of the city that
issued the money. The part that he played in the work to be
done thus had great importance. This is proved by the allusion
made to it in the official title borne at Rome by the moneyers

anneal the blank after each blow of the press. Now that has a power far different from the hammer wielded by the most vigorous arms. This is how the artist, that I consulted, explains what seems inexplicable at first sight. He believes that the ancients struck the metal while it was still almost in a fused state. With his spoon the workman took from the crucible the desired quantity of met.l, the drop. He poured this while still fluid on the reverse die, and before it had time to cool and harden, he placed on it the face die and let his hammer fall. The strength of the human arm and the weight of the hammer sufficed to impress both images on that paste while yet soft. The procedure thus employed belonged both to casting and striking, to casting by which the nearly fluid metal allowed itself to assume the forms of the dies, and to striking by the firmness that the image owed to the violent blow of the hammer. What a adds to the probability of this hypothesis is even the appearance of the antique pieces, of bloats and crevices that are o often noted on the circumference of the piece. Those defects come from a cooling that came too quickly at the contact of the dies in haste to strike on the metal before it had resumed all its resistance.

Men had previously formed a slightly different idea of the method employed by the Greek coiner in that part of his task. It was in general admitted that before striking the blank, the workman heated it a red to soften it. Perhaps indeed nothing more was necessary to obtain a very clear stroke, when the type of the piece to be struck did not have to present a very accented relief, which was the most common case. It is possible that most frequently, to give the material of the blank the desired ductility, men were satisfied to revive it in the heat of a strong flame. The blanks had then been prepared in advance, in the form of metallic lenses entirely ready to receive the impression, that changed them into current coins. The workman charged with this preparation had to verify the standard of t the metal before casting it in his moulds, then to watch the casting, so that each ingot that it furnished had exactly the weight assigned to it by the monetary system of the city that issued the money. The part that he played in the work to be done thus had great importance. This is proved by the allusion made to it in the official title borne at Rome by the monetary

[illegible] cient world, the procedures applied by the industry of the fabrication of money did not experience changes that merit to be noted. Until the fall of the Roman empire and during the entire middle ages till the threshold of modern times, they reproduced nearly the same as they were in the Greece of the 6 th century B.C.

Being given this stationary persistence of the technics, [illegible] iceful representation of a Greek mint the painting, that in the house of the Vettii at Pompei shows cupids occupied in fabricating money.(Fig. 31).[1] First scene: at both sides are two workmen that heat the metal blanks. The first [illegible] on a footstool and manages with both hands a bellows to [illegible] end of his tongs, and with the left hand holds a reed through which he blows on the ingot to remove the cinder and [illegible] that heating to red causes on the surface of the metal. Second scene; a cupid sits on a chair with his foot on a footstool, [illegible] for striking by the aid of a little hammer. Before him is a desk on which are two balances and a series of small weights arranged in three superposed drawers. Third scene: a cupid weighs a blank in presence of a winged woman seated [illegible] as has the control of just weights, the authority that guarantees the values of the coins, which on Roman coins is personified by the figure which the legends sometimes call Aequitas and sometimes Moneta. Put in the place of that symbolical image in thought an overseer charged with verifying the weights, and you restore the reality. Fourth scene: two cupids strike the coin. An anvil set in an enormous block separates them. One holds in both hands a tongs with matrix resting on the anvil. The plank is between the two jaws of the tongs. The other has a hammer with a long handle and strikes [illegible] clock.

Note 1.p.56. We borrow from Babelon the illustration.

magistrates (Latin). One cannot be surprised to see us demand here some information from the Roman mints, on what might be that of the Greek mints. During the entire duration of the ancient world, the procedures applied by the industry of the fabrication of money did not experience changes that merit to be noted. Until the fall of the Roman empire and during the entire middle ages till the threshold of modern times, they reproduced nearly the same as they were in the Greece of the 6 th century B.C.

Being given this stationary persistence of the technics, there is no risk of an anachronism by reproducing as a faithful representation of a Greek mint the painting, that in the house of the Vettii at Pompei shows cupids occupied in fabricating money.(Fig. 51).[1] First scene; at both sides o are two workmen that heat the metal blanks. The first stands on a footstool and manages with both hands a bellows to fan the flame. His companion holds the ingot in the fire at the end of his tongs, and with the left hand holds a reed through which he blows on the ingot to remove the cinder and scale, that heating to red causes on the surface of the metal. Second scene; a cupid sits on a chair nith his foot on a footstool, before him an anvil on which he prepares the blanks for striking by the aid of a little hammer. Before him is a desk on which are two balances and a series of small weights arranged in three superposed drawers. Therd scene; a standing cupid weighs a blank in presence of a winged woman seated on a stool without back, before which is a footboard. This woman has the control of just weights, the authority that guarantees the values of the coins, whom on Roman coins is personified by the figure which the legendr sometimes call Aequitas and sometimes Moneta. Put in the place of that symbolical image in thought an overseer charged with verifying the weights, and you restore the reality. Fourth scene; two cupids strike the coin. An anvil set in an enormous block separates them. One holds in both hands a tongs with matrix resting on the anvil. The plank is between the two jays of the tongs. The other has a hammer with a long handle and strikes with all his force. The hammer and a spare tongs rest against the block.

Note 1.p.56. We borrow from Babelon the illustration of

this painting and the description that he gives. (Traite, Part I; vol. I, p. 899-901.

These very simple instroments, the balance, tongs, anvil and hammer, are represented on several Roman denariuses.[1] As for the dies whose impression is made on the blank betwe-enthat anvil and hammer, some of them have come down to us. There are two or three dies of Greek coins and a larger number for Roman coins. The most ancient that can be cited is an iron die that gives the reverse of the silver coins of Philip of Macedon, father of Alexander. This is the one that the coiner held in his hand and not the reverse die fixed on the anvil. It har a long shank whose crushed and spread head bears unequivocal traces of vigorous and numerous blows of the hammer. The type is badly preserved; but although the lettering is obliterated, there are quite clearly recognized the outlines of the silver stater of Philip (Fig. 52). There is also preserved the reverse die of a great coin of Berenice II, queen of Egypt. That is of cylindrical form and was the die for the anvil. An ear projecting at the side of the shank formed a stop intended to hold the die in proper place, to prevent it from sinking too far in the anvil (Fig. 53).

Note 1.p.57. Babelon. Traite. part I; vol. I, p. 901-904; Figs. 19-23.

Of the many dies so preserved, most are of bronze; others are iron rods with the end hardened in temper or to which h has been welded a steel die. The ancients did not know chemical analysis. They could not know how some atoms of carbon combined with the iron modified its properties so as to create an alloy offering much more hardness than the best hardened iron; but by practical experiments they came to produce this metal without whose aid they could not undertake to produce certain works, which they readily executed. Aristotle has steel in view when he speaks of purified iron.[1] he called it chalyps, because the invention of the processes for obtaining it was attributed to those metallurgists of Asia Minor, that enjoyed a legendary reputation in Greece. The country of Chalybes is that province of Tokat and of Sivas, where today are worked very rich mines of iron and of copper.

Note 1.p.58. Aristotle. Meterologica. IV. 9-10.

Workmen believe that the largest and most beautiful Greek

[illegible]
[illegible]
cesses of lithoglypn in regard to glyptics.[2] Experiments [illegible]
by skilful practicians have demonstrated that steel can by
[illegible]
with diamond dust or emery, that are set in the shaft of a
[illegible]
obtained must be welded to an iron shank. That could support
[illegible]
and was quickly fractured by the blows.

[illegible]

Note 3.p.58. See the report of the experiments in Babelon,
[illegible]

This labor of engraving on steel was lengthy and minute.
[illegible]
[illegible]
[illegible]
er bronze nor iron can be engraved by the drill. It was oth-
er with those metals. The bronze die was executed by mean
[illegible]
cast was made in that mould. If the operation was well per-
[illegible]
otype original engraving. If it seemed necessary to correct
[illegible]
sion, retouches were sometimes made with the graver.

Iron does not lend itself to casting. To obtain a die, it was necessary to attack it with chasing tool and graver, instruments managed with the palm of the hand or on which sli[illegible] the blows are struck; but this process must have been little employed. The iron die was almost[25] difficult to make as the steel die, and it was far from having the same resistance. On the other hand, if the bronze dies must be frequently renewed, the use of the mould allowed them to be made quickly and at small cost. In spite of the facility thus found in replacement, men sometimes persisted by economy and indolence in using them when it would have been better to reject them.
[illegible]
by dies already worn or cracked. Among others, this is the
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dies were cut with the drill, i.e., with the instrument used by the engravers of fine stones. We have described those processes of lithoglyph in regard to glyptics.[2] Experiments made by skilful practicians have demonstrated that steel can be attacked and worked like gems by drills of soft iron armed with diamond dust or emery, that are set in the shaft of a little lathe moved by a pedal.[3] Dies of tempered steel thus obtained must be welded to an iron shank. That could support the repeated blows of the hammer. Steel broke more easily a and was quickly fractured by the blows.

Note 2.p.58. Histoire de l'Art. Vol. II, p.671-673.

Note 3.p.58. See the report of the experiments in Babelon. Traite. Part I. Vol. I, p. 671-673.

This labor of engraving on steel was lengthy, and minute. One was only compelled to this by exception, when the city desired to have coins that would be masterpieces. They were usually satisfied with a die of bronze or of iron. Now neither bronze nor iron can be engraved by the drill. It was cheaper with those metals. The bronze die was executed by means ofa mould made from the model executed in wax or clay. The cast was made in that mould. If the operation was well performed, the bronze coin left the mould with all the fineness ofthe original engraving. If it seemed necessary to correct some slight defects on the proof, or to add a certain precision, retouches were sometimes made with the graver.

Iron does not lend itself to casting. To obtain a die, it was necessary to attack it with chaseng tool and graver, instruments managed with the palm of the hand or on which slight blows are struck; but this process must have been little employed. The iron die was almost as difficult to make as the steel die, and it was far from having the same resistance. On the other hand, if the bronze dies must be frequently renewed, the use of the mould allowed them to be made quickly and at small cost. In spite of the facility thus found in replacement, men sometimes persisted by economy and indolence in using them when it would have been better to reject them. All great die-sinkers possess some specimens of coins struck by dies already worn or cracked. Among others, this is the case for a beautiful decadrachme of Syracuse, of which several specimens exist that were struck after the fracture of the

face die. The edge of the coin beneath the neck and behind the nape was chipped. There is a long seam in the field.[1]

Note 1.p.59. Babelon. Part I, p. 936, Fig. 31.

Even where the die was intact, the pieces issued sometimes presented defects due to the nature itself of the process of striking. Under the blows of the hammer, there frequently occurred that the edges of the blank split. Also sometimes a single blow of the hammer was insufficient to obtain a perfect proof; it was necessary to strike a second stroke. They did not then know the use of the ferule, that now when a blank must receive several blows of the balance press, holds it sufficiently close to protect it from the least displacement between the successive applications of the hammer. Underthe first shock of the die, the blank slipped slightly. It has not always been replaced with sufficient care in its initial position. Certain antique Greek and Roman coins bear the mark of this negligence. They are termed marred pieces.[2] Thus are designated coins on which legends and images are partly double or triple, according as the die is displaced once or twice in the intervals of the blows of the hammer. When the mint was well managed, the coiner went to the crucible pieces so marked; some still succeeded in slipping into circulation.

Note 2.p.59. Babelon. Traite. Part I. Vol. I, p.940.

The most skilful workmen did not always succeed in entirely preventing the bad effects of this repeated hammering. Study with a lens the great gold medals of the treasury of Tarsus possessed by the Cabinet of Antiques of the National Library; you can distinguish and almost count the successive blows of the hammer applied to those enormous blanks. "Although this difficult striking was effected without doubling, still one perceives sketched on the field behind each other, two or three profiles of the effigies. At each blow of the hammer as the die sunk deeper, the metal was forced by gradual slips from the centre to the circumference."[1]

Note 1.p.60. Babelon. Traite. Part I. Vol. I, p.935.

On the arrangement which numismatists designate by the name of hollow square, it is the more necessary to insist, since in these recent times has been given an explanation of this peculiarity that seems erroneous. "The reverse of

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distinguished little symbols, globules or even figures of
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ow square with its surface modified according to the country
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city or region rather than tn another. The darics have a rec-
tangular decression on the reverse. The square of the stater
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ra, two rectangles are juxtaposed and decorated by flowers.
(Pl.VIII, 22). At Cyzicus, this is a regular square divided
[illegible]
the wings of a mill.

"It is habitually repeated that the sunken square of the
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metal blank to prevent it from slipping under the shock of
the die on the face. A careful examination of the coins op-
pose that theory. The sunken square is not found in project-
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ents the end of an instrument serving to punch and used like
a mallet. The sunken square is really the impression made
by the punch and not by the die. Thus are explained on the
primitive staters of Asia Minor, Cnemides and the Phocaites
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several such impressions on the same coin have been made by
the aid of different punches applied separately to the blank
after each other."

"The type in relief on archaic coins is then the impression
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sufficed to ensure the stability of the blank under the op-
pression of the rod driven vertically by blows of the hammer.
Later, when the sunken square is occupied by a developed ty-
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the most ancient Greek coins is occupied by one or more rectangular or square depressions, deep and with irregular roughness ower the entire surface of the sunken field. Those depressions represent the projecting parts of the dies that p produced them. Sometimes in the middle of the roughness are distinguished little symbols, globules or even figures of animals. Most frequently the die has produced a simple hollow square with its surface modified according to the country of the mint, so that the form and appearance of this square suffices to ensure the assignment of certain pieces to one city or region rather than tn another. The darics have a rectangular depression on the reverse. The square of the stater of Egina is divided by diagonals in relief that join at the centre, forming five sunken triangles (Pl.VIII, 4). At Corcyra, two rectangles are juxtaposed and decorated by flowers. (Pl.VIII, 22). At Cyzica, this is a regular square divided in four compartments placed obliquely, making it resemble the wings of a mill.

"It is habitually repeated that the sunken square of the reverse of archaic Greek coins represents the projecting part of the bottom die on which by this means was fixed the metal blank to prevent it from slipping under the shock of the die on the face. A careful examination of the coins opposes that theory. The sunken square is not found in projection on the rod where it would have held the blank; it represents the end of an instrument serving to punch and used like a nailset. The sunken square is really the impression made by the punch and not by the die. Thus are explained on the primitive staters of Asia Minor, Cnemides and the Phocaides and some pieces attributed to Miletus, Phocea, Cyzicus, that several sunk impressions on the same coin have been made by the aid of different punches applied separately to the blank after each other."

"The type in relief on archaic coins is then the impression of the rod on the bottom die. For that this side of the piece is sensibly convex. The field of the die was concave, which sufficed to ensure the stability of the blank under the compression of the rod driven vertically by blows of the hammer. Later, when the sunken square is occupied by a developed type, there no less remains one produced by the rod that retains a

square and flat form, while the die remains circular and con-
cave. After the middle of the 4 th century, save local excep-
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effigy or principal type remains convex, while the reverse
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of large diameter, the face continues to be produced by the
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Note 1.p. 61. Babelon. Traite. Part I. VVL. I.p.930-937.

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is, that which numismatists define by incuse coins. They de-
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southern Italy from the middle of the 6 th century are found
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that bear on the face a type of relief, on the reverse being
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rudction of the face, as if the piece were only a metal [illegible]
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relief. Sometimes the type of the reverse, while being the
same as that of the face, still presents differences in det-
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face and reverse, the coin appearing to be a plaque of rep-
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the relief of the face being reproduced in the sinking of
the reverse (Pl. IX, 7, 8), or indeed there is the ear in
relief on one side, on the other being a sunken grain of
wheat or the skull of an ox. At Siris the bull is alike on
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ations."[1]

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square and flat form, while the die remains circular and concave. After the middle of the 4 th century, save local exceptions, all trace of the sunken square disappears from the reverse of Greek coins, and the dies for both sides become circular. Yet the face of the piece, i.e. the side with the effigy or priocipal type remains convex, while the reverse is flat or even slightly concave. Then in general for pieces of large diameter, the face continues to be produced by the lower die."[1]

Note 1.p. 61. Babalon. Traite. Part I. VVl. I,p.930-932.

A peculiarity of archaic Greek coinage in certain regions is, that which numismatists define by incuse coins. They designate thus coins whose type is sunken on one of their sides.

In the numismatic series of a great number of cities of s southern Italy from the middle of the 6 th century are found silver coins with large and flat blanks of moderate thickness, that bear on the face a type of relief, on the reverse being a sunken one. Sometimes the reverse is merely the exact reproduction of the face, as if the piece were only a metal round whose double impressions had been raised by a punch in r relief. Sometimes the type of the reverse, while being the same as that of the face, still presents differences in detail, that attest the use of two special dies, one sunken and the other in relief. Finally, sometimes the sunken reverse has no relation to the relief of the face, and it sometimes belongs to the numismatics of a different city. Certain pieces at Tarente show us Taras on the dolphin, identical on t face and reverse, the coin appearing to be a plaque of repoussee metal (Pl. IX, 1, 2). On others the sunken type of Taras is opposed in relief by Apollo Hyacinthe kneeling. At Metaponte on certain pieces are two similar ears of grain, the relief of the face being reproduced in the sinking on t the reverse (Pl. IX, 7, 8), or indeed there is the ear in relief on one side, on the other being a sunken grain of wheat or the skull of an ox. At Siris the bull is alike on both sides (Pl. Vl 19, 22). The coins of Crotona, Caulonia, Rhegium and Posidonia lend themselves to analagous investigations."[1]

Note 1.p.62. Babelon. Traite. Part I. Vol. I, p.629-630.

Why did the cities of Magna Grecia agree to adopt this mode

of incuse coins? No one knows; but all the same it was soon abandoned, and only rare examples are cited of attempts made much later to return to it in Asia Minor or in Enomaia(?). This is because the defects inherent in this practice could not escape the refined taste of the Greeks. In case of conformity and identity of the types of face and reverse, this was only a servile(?) repetition of the latter in relief. When the two types differed, that of the reverse was insufficient; it was almost neglected. By the intaglios it is known with what trouble the eye of the spectator [illegible] and appreciate in the shadow of the hollow the details of the [illegible] of the figure.

Note [illegible]. Babelon. The same. p. [illegible].

We do not have to occupy ourselves here with what numismatists call bract coins. In most countries inhabited by the Greek race have been noted small disks like coins in gold or silver, made of a very thin plate and [illegible] produced by the punch by the simple process of stamping, [illegible] in relief on one side and hollow on the other. Dimensions are always small. A great number of these have been found [illegible] found with other objects in many Greek necropolises. These plates of metal never served as money. They were sewn on clothing, as sometimes by little holes noted on the edges of the pieces, or indeed they were inserted in necklaces and crowns. It is also possible that they were sometimes placed in the mouth of the dead as an offering to Charon; they would then have been an imaginary representation of the traditional obol.

Note [illegible]. Babelon. The same. p. [illegible].

The name of plated coins is given to pieces composed of a metal plate of small value, copper, iron, lead or tin, forming the core, but entirely covered by a thin layer of silver or more rarely of gold, [illegible] at the same time.[1] There exist a certain number of plated coins of gold and of electrum in the Greek series, even in the primitive epoch. The plated Greek coins with a coating of silver are more common without being very much distributed. Some Median shekels are plated. Of two known examples of [illegible], one is plated. There are also known plated silver coins of Cyr-

of incuse coins? No one knows; but all the same it was soon abandoned, and only rare examples are cited of attempts made much later to return to it in Asia Minor or in Phoenicia.[2] This is because the defects inherent in this practice could not escape the refined taste of the Greeks. In case of perfect identity of the types of face and reverse, this was only a useless repetition of the image in relief. When the two types differed, that of the reverse was sacrificed; it was almost neglected. By the intaglios it is known with what trouble the eye of the spectator experienced to follon and appreciate in the shadow of the hollow the details of the modeling of the figure.

Note 2.p.62. Babelon. The same. p. 631.

We do not have to occupy ourselves here with what numismatists call bract coins. In most countries inhabited by the Greek race have been noted small disks like coins in gold or silver, made of a very thin plate and decorated by an emblem produced by the punch by the simple process of stamping, thus in relief on one side and sunk on the other. Dimensions are always small. A great number of these have been found with the emblem of the owl in Attic tombs. Thay have been found with other emblems in many other cemeteries. These plates of metal never served as money. They were sewn on clothing, as sometimes by little holes noted on the edges of the pieces, or indeed they were inserted in necklaces and crowns. It is also possible that they were sometimes placed in the mouth of the dead as an offering to Charon; they would then have been an imaginary representation of the traditional obolus[1]

Note 1.p.63. Babelon. The same. p.632-633.

The name of plated coins is given to pieces composed of a metal blank of small value, copper, iron, lead or tin, forming the body and entirely covered by a thin sheet of silver or more rarely of gold. Both the blank and the covering were struck at the same time.[2] There exist a certain number of p plated coins of gold and of electrum in the Greek series, e even in the primitive epoch. The plated Greek coins with a coating of silver are more common without being very much distributed. Some Median shekels are plated. Of two known examples of money struck by Themistocles at Magnesia, one is plated. There are also known plated silver coins of Syr-

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cerning the value of the money issued by it. The Roman State [illegible] under the empire were abundant issues of plated money.

Note 2.p.83. F. Lenormant. Monnaies et medailles.p.49.

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[illegible] rication of Greek coins, there is one point on which our cu- [illegible] of all those coins. In these is very early noted a vivid art feeling, even though the execution is still marked by awkwa- [illegible] ed into the manual skill of such a difficult avocation? Were they recruited among slaves or freemen? Did they receive high [illegible]

The ancient texts make no reply to these questions. For all [illegible] temple of a mythical hero only known to us under his cogno- [illegible] stallation of the mint in an annex of the Theseum would have [illegible] official standards of weights and measures; but the names read on the coins of Athens are those of the magistrates

Syracuse, Messana, Metaponte, Crotona, Velia, Posidonia and of Campania. They are noted in all those regions; but are always very exceptional.[3] It seems that there is reason to see in those pieces the products of clandestine mints or of counterfeiters. Nothing causes one to think that a Greek State, republic or monarchy, sought to deceive the public concerning the value of the money issued by it. The Roman State was less honest. On various occasions under the republic and under the empire were abundant issues of plated money.

Note 2.p.63. F. Lenormant. Monnaies et medailles.p.49.

Note 3.p.63. Babelon.Traite.partI. Vol. I, p.632-635.

In what concerns this history of the procedures of the fabrication of Greek coins, there is one point on which our curiosity truly finds itself unsatisfied. We should like to h have some information on the artists who engraved the dies of all those coins. In these is very early noted a vivid art feeling, even though the execution is still marked by awkwardness, and a frank seeking for nobility or grace. One would know what position the cities, that appear to have attached most importance to the beauty of their monetary types, gave to their engravers whose professional skill gave them the a advantage of excelling in that respect their neighbors and rivals. By what apprenticeship were these engravers initiated into the manual skill of such a difficult avocation? Were they recruited among slaves or freemen? Did they receive high salaries? What reputation accompanied them for their patient labor?

The ancient texts make no reply to these questions. For all antiquity, the sole mint of which we possess some information is that of Athens.[1] It was established in a dependency of the temple of a mythical hero only known to us under his common name of Stephanophore or "wearer of a crown." According to a conjecture having all probability, this divine personage was none other than Theseus, the national hero of Athens. The installation of the mint in an annex of the Theseum would have given birth to the Athenian tradition, which attributed to Theseus the invention of money. From an inscription it is known that this building also contained the deposit of the official standards of weights and measures; but the names head on the coins of Athens are those of the migistrates

under whose supervision that mint was carried on, and are not those of the engravers of the dies. Certain engravers of fine stones and certain goldsmiths had acquired in antiquity a very extended reputation, so that their names were transmitted by Pliny and by some other ancient authors; but nowhere is found mentioned the name of an engraver of coins.

Note 1.p.64. Babelon. The same. p. 836-838.

This silence does not fail to cause some astonishment. By t the happy invention that they put into the choice of types, t that they created, and the beauty in the execution of the image, those engravers lent a precious assistance to the cities employing them; they certainly caused their coins to be sought even outside the limits of the State issuing them. They must have been well paid, and for a long time, this was all that t they demanded. From the invention of money until the last nears of the 5 th century, there is not found on Greek pieces a single inscription, that can be interpreted as an artist's signature. Yet there came a time when the most skilful among them were tired of this perpetual anonymity. We have learned this from certain coins of Cydonia in Crete and of Clazomene in Ionia. On the former is read "Neuantos epoei" and on the others "Theodotos epoei." This formula is the same as that used by the sculptors, who inscribed it on the bronze or marble of their statues and reliefs.

Doubt is no longer permitted; it is proved that the engravers of dies ended in causing honor to be done to their talent. Thus informed, "numismatists must have asked whether on the monuments forming the subject of their studies, there did not exist other signatures of the same kind with a formula less complete and omitting the verb, and if there were rules allowing them to distinguish with some certainty these names of artists from those of the responsible magistrates charged with the fabrication of the money. The result of these researches has been to cause recognition of the inscriptions of artists in a certain number of names appearing on the coins, traced in extremely small characters, generally half concealed in an unusual position, in an accessory of the type, in the band of the headdress, a fold of the clothing, in places much less visible than those where are shown the names of magistrates, that are always written in larger letters." [1]

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[illegible], Procles, worked at times for several cities. The custom
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only late and only in places. Even where it served to tend to
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that after the middle of the 4 th century, the names of the en-
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erudite treatises, have long been called medals, and are still
so termed in ordinary conversation.[2] Still today the language
of numismatists establishes between the coin and the medal a
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silver or bronze issued into circulation for the needs of com-
merce, with power of selling and buying. The medal is a piece
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ed by a type in relief and bears an inscription, but which is
not destined to serve as a means of exchange. What is proper,
when it is ordered, is to preserve by the talent of the artist
[illegible]

Note 1.p.65. F. Lenormant. Monnaies et medailles. p.71-72.

It is principally on the coins of Magna Grecia and of Sicily that are found the signatures of artists. There are some twenty that can be held as assured. Certain engravers, Evainetos, Kimon, Procles, worked at times for several cities. The custom of allowing the artists to inscribe their names on the coins whose dies they executed, does not appear well established elsewhere than in those two countries. Everywhere else, the fact only appears exceptionally. Outside that region, there are certain examples of similar signatures, only those of Neuantos of Cydonia and of Theodotos of Clazomene. It has been thought possible to assign the same character to names written in abridged form on some pieces of Cydonia and of Aptera in Crete, of the league of the cities of Chalcidice, of Pharsalus in Thessaly, and of Seleucus IV, king of Syria. The place that these names occupy on coins in question, is the same as we have seen assigned to assured signatures. Whatever it be with these conjectures, one must recognize that this habit of signing coins did not b become general in the Grecian world. It was introduced there onlw late and only in places. Even where it served to tend to prevail, it did not persist. The most ancient signatures known are not earlier than the last years of the 5 th century. On t the other hand, if one omits some doubtful examples furnished by the royal coins of the Hellenistic age, it can be affirmed that after the middle of the 4 th century, the names of the engravers disappear forever from Grecian money.[1]

Note 1.p.66. Lenormant.Monnaies et medailles. p.72-77.

We have always employed the word coin to designate the pieces, whose fabrication we have described. Yet those pieces, even in erudite treatises, have long been called medals, and are still so termed in ordinary conversation.[2] Still today the language of numismatists establishes between the coin and the medal a very clear distinction. In this the coin is a piece of gold, s silver or bronze issued into circulation for the needs of commerce, with power of selling and buying. The medal is a piece made of one of the same metals, which like the coin is decorated by a type in relief and bears an inscription, but which is not destined to serve as a means of exchange. What is proposed when it is ordered, is to preserve by the talent of the artist executing it, the memory of an event that has impressed contemp-

contemporaries, or to perpetuate in a material on which time [illegible]
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relative or a friend.

Note 2.p.85. On the etymology and the earliest use of the [illegible]

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responds to the idea of the medal, such as we have just def-
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medal, or knew it very late in the decadence of art. Doubt-
less among the Greeks and especially among the Romans, coins
by their figures and legends often referred to ancient or re-
cent facts, that were marked in the life of families or of the
State. There is a certain measure these coins are like medals;
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they remain coins, in the sense that they were struck to pass
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that is why at least for Greece, one can affirm without a sha-
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ests most ancient is the celebrated piece known under the name
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torians and lexicographers (Pl. VI, 2, 7).[1] On the conditions
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rians in 480 near the river Himera. Whether their materials
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il of the invasion, who followed the example of Demareta in o
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the war, or that they came from a crown that the African capt-
ives offered to the queen in recognition of the very mild tre-
atment and her good offices, matters little; but it is evident
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more involved. The crown of laurel adorning the brow of Are-

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contemporaries, or to perpetuate in a material on which time has but little effect, the image of a prince or a master, a relative or a friend.

Note 2.p.38. On the etymology and the earliest use of the word medal, see Babelon. Traite. Part I, vol.I, p. 6-9.

One would seek in vain in Greek or Latin a word that corresponds to the idea of the medal, such as we have just defined it. Properly speaking, the ancients did not know the medal, or knew it very late in the decadence of art. Doubtless among the Greeks and especially among the Romans, coins by their figures and legends often referred to ancient or recent facts, that were marked in the life of families or of the State. There in a certain measure those coins are like medals; but even where a commemmorative character is most emphasized, they remain coins, in the sense that they were struck to pass from hand to hand, so as to respond to the needs of commerce. That is why at least for Greece, one can affirm without a shade of hesitation, even in regard to pieces that because of exceptional dimensions, at first sight might seem to have never played this part of ready money. For example, this is the case with those broad Syracusan selver pieces, that present on the face the head of Arethusa. That of these medallions which appears most ancient is the celebrated piece known under the name of Demaretion, a piece mentioned by several Greek writers, historians and lexicographers (Pl. VI, 2, 7).[1] On the conditions in which would have been formed the treasure of metal for that issue, those authors are not agreed; but they are in accord that these coins were struck by the care of Demareta, wife of Gelon after the cruel defeat that he inflicted on the Carthaginians in 480 near the river Himera. Whether their materials were furnished by the jewels of the Syracusan women in the peril of the invasion, who followed the example of Demareta in o offering them to the country to contribute to the expenses of the war, or that they came from a crown that the African captives offered to the queen in recognition of the very mild treatment and her good offices, matters little; but it is evident that in the type adopted for these pieces as a historical testimony, as in the types of our medals, although less formal and more involved. The crown of laurel adorning the brow of Arethusa

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recallsthe recent victory of Gelon, and the little figure of a lion seen on the reverse symbolizes conquered Africa. This coin is no less an exact multiple of the monetary unit. It is the weight of 50 Sicilian libras or of 10 Attic drachmas; it certainly performed the function of money. What does not allow a doubt of this is, that it has come to us in some 10 examples. Further, why should its purpose be different from that of other Syracusan decadrachmas of the same size and weight, that during the entire course of the 5 th century were issued by t the Syracusan mint in such great number, that today they fill the cases of our cabinets of medals?

Note 1.p.67. See the texts collected by Babelon. Traite,p.472-474.

One can say as much for the largest gold coin left to us by Greek antiquity, that of Eucratid, king of Bactriana, possessed by the Cabinet of the National Library (Fig. 54).[2] The first movement of one perceiving it in the glass case in which it is exhibited, is to cry out:- "Oh, beautiful medal!" This pretended medal however is also only a coin. Only by its enormous size does it differ from the pieces of gold and silver that the successors of Alexander issued in the Orient during two centuries, and particularly the other known coins of Eucratid. Same style, same character of the type; an entirely similar formula for t the legend. What further decides the question is the fact that by its weight of 1,2 grammes, this piece has its marked place in the monetary system of the kingdoms resulting from the dismemberment of the Macedonian empire. It agrees with that; it represents an unusual but normal size in it; it is equivalent to 20 Attic staters, 40 gold drachmas, 500 drachmas of silver. It can be compared to those gold pieces of 50 or 100 francs, whose dies exist in our mint, and that are stsuck in small numbers on certain occasions, to offer them as a gift. Very rare, these pieces never enter into circulation; but they are no less money in the entire force of the term.

Note 2.p.67.Babelon. Traite, p.440; Lenormant, Monnaie, etc.p.7,8.

To find true medals in antiquity, it is necessary to descend to the time of the Roman emperors. In the series dating from that epoch after the reign of Trajan are found pieces of gold, silver and bronze, recognizable in general by their exceptional dimensions, which have been never money, and although fabricated

by the same procedures, had a different purpose.[1] These are w what numismatists have the habit of designating by the term medal or medallion, from the Italian medaglione, a great medal. Those medals were presented by the emperors to their intimates or to personages that they desired to honor; they were worn as decorations by the officers and soldiers; they were inserted in the ensigns of the legions. Yet others appear to have had a talismanic value. Here is not the place to describe them or to enumerate the quite varied uses to which they were devoted. V Very beautiful specimens can be seen in the cabinet of Antiques, in the glass case in which are exhibited near the coin of Eucratid the three great medals of the treasury of Tarsus, struck under the reign of Alexander Severus. Their diameter is from 2.36 to 2./6 ins. They bear on the face the heads of Hercules, of Alexander the Great and of his son Philip.[2]

Note 1.p.68. Lenormant. Monnaie etc. Vol. I, p. 8-28.

Note 2.p..8. The same. p.41-42; Babelon, p. 681-682.

Every coin has two sides, two faces. To distinguish these two sides of the piece in the descriptions, numismatists have had to adopt terms to prevent all uncertainty. They have not delayed to recognize, that usually one of these sides has more importance than the other. This that on which is represented and is constantly repeated in the same series the type representing the authority in whose name the coin is struck. They call this side the face, obverse or right. The word face is improper here because it seems to always show that this side always has for type a head, an effigy of a deity or of the prince, which is far from always being the case. On the other hand the word obverse, from its etymology (adversus) might seem to have a sense contrary to that proposed to attribute to it. We always prefer to say the right side; the expression explains itself and the usage has consecrated it. For the opposite and secondary side, there is no difficulty. The word reverse is perfectly clear. To make a distinction, one uses head or tail!, when in a bet a coin is cast into the air to see how it will fall. That mode of speaking is a legacy of the past. In the middle ages men usually said face for the side with the effigy and pile for the reverse, i.e., for the side laid on the coining anvil at the moment of striking.[1]

Note 1.p.69. Babelon. Vol. I, p.378-379.

[illegible]
face from the reverse. On the face is seen the effigy of the prince, while on the reverse is only seen the accessory type [illegible] one has to describe the pieces, that are of a good art period [illegible] ...ibute the primacy. To decide, it is necessary to compare the [illegible] the coins of a city, by it will be defined the face of the pieces. [illegible] one side is found the head of Pallas (Pl. V, 7), and on the other is the owl (Pl. V, 13). No doubt is possible. The face will be entirely filled by the image of the goddess protecting [illegible] square. On the contrary, it seems that one could hesitate for [illegible] Pegasus and a woman's head, that of Athena Chalinites, who also [illegible] about half a century after the Pegasus. That showed itself from [illegible] of the face on the series of Corinthian coins.[1]

Note 1.p.70. This is the view that Babelon has taken in his

Note 1.p.69. Babelon. Vol. I, p.378-379.

On most modern coins as already on those of the Macedonian kings and the Roman emperors, it is easy to distinguish the f face from the reverse. On the face is seen the effigy of the prince, while on the reverse is only seen the accessory type modeled in more summary fashion and with less relief. This is frequently only a purely decorative motive, a crown of leaves enclosing the legend, a cluster of branches or of flowers, sometimes an armorial shield. The task is not always easy when one has to describe the pieces, that are of a good art period and were struck by Anonymous Greek cities. There are in those series certain coins where the types of the two sides appear to present nearly the same interest by the choice of themes a and by the execution of the engraving. One is then quite embarrassed to know to which of the two sides it is proper to attribute the primacy. To decide, it is necessary to compare the types. If one of them reappears as fixed in all or nearly all the coins of a city, by it will be defined the face of the piece. The reverse will be the side on which from issue to issue the type varies according to the wish of the monetary magistrates. It sometimes occurs that the types of both sides are equally constant. For example, this is the case for Athens, where on one side is found the head of Pallas (Pl. V, 7), and on the other is the owl (Pl. V, 13). No doubt is possible. The face will be entrely filled by the image of the goddess protecting the city, a goddess of which the owl is only an attribute, like the olive branch sharing with that owl the field of the sunken square. On the contrary, it seems that one could hesitate for Corinth. The two types opposite each other on its coins are a Pegasus Peasus and a woman's head, that of Athena Chalinites, who aided Bellerophon in subjecting to the bridle the untamed horse. One might be tempted to claim for Athena the honor of the face. H However what decided numismatists to term reverse the side with the head is, that this appeared on the coins of Corinth only about half a century after the Pegasus. That showed itself from the first hour, when there was still on the other side only a sunken square (Pl.VIII, 10). Pegasus then has the title of the first occupant. This will be what will be regarded as the mark of the face on the series of Corinthian coins.[1]

Note 1.p.70. This is the view that Babelon has taken in his

description of the most ancient coins of Corinth. Babelon, p.790-810.

There will be found frequently in this study other technical terms, whose use does not lead to the same difficulties. The standard of a coin is the number representing its chemical composition, according as the metal is of absolute purity, that is never the case, or that it contains more or less alloy. The ancient mode of computation by carats has now fallen into disuse. Men reckon by thousandths. It will be said that the Persian daric is 970 fine; this states that it contains 970 parts of gold to 30 parts of a less precious metal, silver or copper.

3. Names of Greek Coins.

The terms found employed in Greek authors to designate the coins that they mention do not all have the same character.[2] Those most common are derived from the weight and value of the piece as well as from the nature of the metal employed. Those are the only ones to be difined here; we shall use them to qualify the pieces that we have to describe; Only recall that among Greek and Roman writers, when there is a question of currency circulating under their eyes, one also meets with the appellations of another kind. The ordinary names of certain coins were derived from those of persoanges that had caused them to be fabricated. Thus men spoke of Creseids and Darics, of Demarets, Philips and Alexanders of gold. There were also names derived from the places of issue:- Cyzicenes, Phocaides, Aeginas, Beotics, Congres, etc. Other names had been suggested by the constant repetition of the same type on the coins of a certain c city. Thus are explained names like owls or tortoises, that in current language designated the tetradrachmas of Athens and t the didrachmas of Egina. The archers were Darics; it is known that the image of the king kneeling and bending his bow continued to be engraved on those coins until the fall of the Achaemenid empire, For the two centuries preceding the beginning of our era, the greater part of the silver coinage in Asia Minor was composed of pieces of a common type on one side, though s struck in different mints, the mystic casket of Bacchus opened and allowing the escape of a serpent. Allusion is often made to those coins in the history of that time; they are always called cistophores.

Note 1.p.71. Babelon, Vol. I, p.-----).

Note 2.p.71. On the different names given to coins among the Greeks, see Babelon Traite etc. p. 401-521.

Without stopping for these peculiarities, we have to determine the sense of the terms, which by themselves imply the idea of a certain value; but it is proper to state at first that t the value represented by the terms in question was not everywhere exactly the same. It varied from one city to another within limits otherwise quite narrow, there is a certain city in which in the course of ages it has experienced some change. The Grecian world was divided into hundreds of little States and was diversity itself. It used several different systems of money, distinguished from each other by the weight assigned to the silver drachma. In all the name drachma was borne by the principal monetary unit. Is it necessary to seek in Greek, as the ancients desired, the etymology of the word drachma, or indeed as certain Assyriologists have supposed, that this term is derived from an Assyrian word darag-mana, which in private interest contracts of the valley of the Euphrates designated the silver ingots by which payments were made? [1]This is a question that we do not have to discuss here. Everything important to retain is, that the Greeks reckoned by drachmas as we reckon in francs. A franc piece weighs 5 grammes. The weight of t the Attic drachma was 4.36 grammes, and that of the Eginetan drachma was about 6.20 grammes.

Note 1.p.72. Babelon. Traite etc. p. 402-404.

If there were variations in the weight of the drachma, according as it was connected to a certain system, at least the divisions of the drachma, i.e., its multiples and summultiples were arranged in the same manner in all systems. All those divisions were not coined; some were merely units of account. Others were struck only on fixed occasions. The most common c coins and found nearly everywhere are the tetradrachma, the didrachma, the drachma, the hemidrachma and the obolus. The obolus is the sixth of the drachma. With regard to it, it must correspond in use with relation to the franc, nearly to our p piece of 25 centimes (5 cents). It was struck in silver in all the systems of weights. With a piece of that size the State at Athens paid the citizens the indemnity due them for their presence at the assembly. The mint at Athens and several others i issued in abundance of coin of the same metal representing the

third of the drachma, the diobolus. The obolus is a common silver coin.

The term stater is found almost as frequently in the authors as drachma, but it is more difficult to define it as it has m more varied meanings. Current language applies it indifferently to coins far from all having the same value, and the list would be too long of the different staters distinguished and enumerated by numismatists; but all silver coins so designated had a common character, they were multiples of the drachma. T The stater aroused the idea of a great piece, much larger than a drachma. It was a little as when with us men formerly spoke of a crown. There were large and small crowns, yet always the name in specie related to a coin larger and heavier than the livre tournois. (21 cents).

Note 1.p.73. On the primitive sense properly assigned to the word stater, if with the Greek grammarians it be derived from the verb stattomai, to seize, see Hulsch. Metrologie. 1862,p. 105. Those grammarians offer no explanation of the word stater. This word is evidently derived from the root sta, to fix or d determine. At the origin, it seems to have had the sense of a weight. This was the weight placed on one plate of the balance that was in equilibrium with the object laid on the other plate. (G. Curtius. Grundzüge der griechische Etymologie. 4 th edition, p. 211).

The particular stater was at first the didrachma; but later the word also served to designate the tetradrachma. It was no less frequently employed in the series of gold coinage, Without other mention, the drachma was the unit of silver coinage, and the stater most commonly represents the standard of gold coinage; it weighed twice the standard of silver. The gold coins called Creseids, Darics, Philips, Alexanders, and in general all gold coins corresponding in weight to the unit of the monetary system, whatever it may be, are staters. This results from several passages of Pollux and of other lexicographers.[1] The stater being the unit for gold, it is understood that this term was also used to designate the unit of the electrum coinage. The phochaites stater, the statires chyzichenoi are frequently mentioned by authors and iuscriptions. The diversity of these uses of the same word could lead to some uncertainty. T This has been perceived by the editors of the inventories of

the treasures of certain temples. For example at Delos, to prevent all confusion, they recknned by staters the silver money; for gold pieces is reserved the term chousons.

Note 1.p.74. Seee Pollux in particular.

In the customs of the ancient world, the gold stater played nearly the part, that has fallen in the modern world to coins like the English pound or our piece of 20 francs, the louis or napoleon, as familiarly said. Among the Greeks were above the stater only the distater, tetrastater and hexastater, coins struck in certain countries exceptionally and in small number. On the contrary in several Greek cities were quite abundant issues of coins corresponding to fractions of the gold stater. There are specimens in that metal of the hemistater or gold d drachma, the third of a stater and the sixth of a stater. The two latter pieces are very frequently found in the electrum c coinage of the coast of Asia Minor.

By reason of the small intrinsic value of the metal, bronze coinage was not made in antiquity with the regularity imposed on the fabrication of coins of precious metals; there sometimes occurs a considerable difference in weight between contemporaneous bronze coins, that represent the same monetary division. The unit of the series of coins made of this metal is the chalchos, a word merely signifying a "brinze piece." In Sicily and Italy, this term was not in use. There the standard weight of bronze was the litra, from which came the Latin word libra. The litra of bronze equaled a little silver piece of 0.86 gramme, that was called noumos; hence the nummus of the Romans. E Everywhere else in the Hellenic world, when it concerned this money of change, men reckoned by the chalchos. In general the chalchos had the value of the eighth part of the silver obolus.

There can be no question of presenting here to the reader a nomenclature that comprises all names of coins found in the a ancient writers. With the multiplicity of the monetary systems, these names vary from one region and one epoch to another. We have made a selection of all these terms. We have only mentioned those corresponding to the coins that we shall find employed in the cities, whose coinage we shall study. If we further apply a certain one to one of the coins that we figure, this is only the use required of us by the legend itself on the coin. By the aid of data supplied by the ancient texts, and

controlling this data by the weights that numismatists have s succeded in giving to the coins in their hands and in defining the system of weights that they reveac. As a general rule, Grek coins bear on the face only the name written in full or abridged, of the city or prince that issued them, and frequently on the back the names of the magistrates that supervised the fabrication. There is the entire legend in place, with some o other secondary mentions. On our coins this comprses another element. The coin of gold, silver or bronze, when we present it to whoever must receive it in payment, speaks to him in a certain sense, stating its name and quality. The word and the number stamped on it tell everyone what value is assigned to it by the State that issued it to the market.

These indications or guarantees are not usually offered by Greek coins to business men. The public judges them by what it knows of the coinage of the city that struck them, by the impression that they give to the eye that examines them and the hand that weighs them; but in the commercial cities to which flow pieces of very different origins, the work of the banker and changer must have become very complex, when he must sort all these coins and determine their relative values. The Greeks appear to have had sometimes a vague suspicion of the profit found in taking the place occupied by modern financiers. There is a certain coin bearing its name in full letters on the field. The word obolos is read on the bronze coins of Metaponte and of Chios,[1] the word triobolon is on t the bronze pieces of Samothrace,[1] hezas on the bronze coins of Segeste, ogchia on a piece from Syracuse.[2] Elsewhere this name is recalled only by the first letters of the name of the coin. For example, Corinth and Leucas issued small silver coins with the type of the head of the Gorgon and the legend trie-((triemibolion, 1 1/2 obolus or the quarter of a drachma).[3] On other little pieces of the same cities and of the same metal are found the abbreviations dio or d, initial of the word dio - bolion.[4] Elsewhere are monograms or beads repeated several times,that indicate the value of the coin.At Colophon the silver hemiobolus bears on the field the monogram composed of the letters H M (Hemiobolion).[5] The triobolus of Mantinea has three acorns of this type.[6]

Note 1.p.75. Babelon.Traite etc. I. p. 430.

Note 1.p.76. The same. I. p. 424

Note 2.p.76. The same. I, p.459.

Note 3.p.76. The same. I. p.426.

Note 4.p.76. The same. I. p.425.

Note 5.p.76. The same. I. p.432.

Note 6.pp76. The same. I. p.424.

Elsewhere in a very late epoch in the 3 rd or 2 nd century B.C. belong the coins on which the engraver in some fashion has inserted in the legend a mention of this sort. At length, experience had caused men in some places to see the advantages offered by this practice. One might expect to see this become general; but it did not so occur. These coins with declared value were always the exception. The inventors of money did n not know all at first. By the effect of habits formed in the time when they learned to use this means of exchange, the people always knew how to do without an indication that seems indispensable to us today. We no longer conceive money without this official determination of its legal value.

4. Types, Marks and Legends.

For the history of art the study of the types has an interest very different from that of the legends. The types are the figures of man or woman, animal or plant, that decorate either both or one side of the coin.[7]

Note 7.p.76. P. Gardner. Types of Greek Coins, an archaeological essay. 1883. We have borrowed more than one useful suggestion from this memoir, in which is much taste and solid erudition. The 16 plates that accompany it are excellent. Never have coins been reproduced from better impressions and with more c clearness.

As soon as it had appeared in Asian Greece, the coin was at first a simple round piece of silver or electrum, a heavy and globular bit, that sometimes had the appearance of an almond, and tended to change into a disk. It did not at first aim at that perfect regularity obtained by the mechanical process in our days applied to the preparation of blanks; but it no less approached by degrees the circular form, which it has since r retained among all ancient and modern peoples. Assume a square or lozenge piece. The fingers that seize it strike its corners. The round piece is more easily handled; it risks less than any

order to make holes in bags and pockets.

The adoption of this form cannot fail to be for much in the mode of execution of the images of Greek money. The theme of this description could be given to the engraver by the [illegible] [illegible] the business of the artist was to find the arrangement best [illegible] of a god, protector of the State, was made the most frequ- [illegible] [illegible] doing this on occasion (Pl. VI, 6, 17) coins of Caulonia [illegible] of Posidonia); but the smallness of the field then forced h [illegible] tach the head from the body. That would alone occupy all the space at his disposal. He then felt himself better able to give it by dint of modelling the character of nobility, impli- [illegible] [illegible] [illegible] contour of the piece. If by chance there remained between this contour and that of the face a void that displeased the eye, nothing was easier than to fill it, either by extending the hair behind, or to scatter around the principal type some little symbols, like those that on one of the most ancient coins of Syracuse, which accompany the head of the nymph Arethusa (Pl. VI, 1, 23).

The head of a man or a woman, treated as a motive sufficient in itself, is a theme rarely used by the arts preceding Greek art. They could admit it sometimes as a motive of ornament as on the Hathor capitals; but these arts were merely narrative. In the tablets chiselled on the surfaces of their tombs, temples and palaces, the Egyptian sculptor and the Assyrian sculptor found no pretext to separate the head from the body. No isola- [illegible] seals or in those of their cylinders. On the contrary in Gree [illegible] data of the programme that he had to draw, from the day when he was required to contribute to the success of the new inven- [illegible] suited to the area that he had to fill; he knew how to manag

other to make holes in bags and pockets.

The adoption of this form cannot fail to be for much in the mode of execution of the images of Greek money. The themes of this decoration could be given to the engraver by the magistrates, interpreters of the traditions of the city; but what was the business of the artist was to find the arrangement best in harmony with the form and dimensions of the field. A goddess or a god, protector of the State, was what he had most frequently represented. He could show this deity on foot, like the statue pessonifying it in the temple. He was not deprived of doing this on occasion (Pl. VI, 6, 17; coins of Caulonia and of Posidonia); but the smallness of the field then forced him to reduce the image much. Most frequently, he preferred to detach the head from the body. That would alone occupy all the space at his disposal; he then felt himself better able to give it by breadth of modeling the character of nobility, implied by the conception that he had the duty to express. This image marvellously suited a circular field. The curves of the t top of the head and of the profile were nearly parallel to the contour of the piece. If by chance there remained between this contour and that of the face a void that displeased the eye, nothing was easier than to fill it, either by extending the h hair behind, or to scatter around the pricipal type some little symbols, like those that on one of the most ancient coins of Syracuse, which accompany the head of the nymph Arethusa (Pl. VI, 1, 24).

The head of a man or a woman, treated as a motive sufficient in itself, is a theme rarely used by the arts preceding Greek art. They could admit it sometimes as a motive of ornament as on the Hathor capitals; but those arts were merely narrative. In the tablets chiseled on the surfaces of their tombs, temples and palaces, the Egyptian sculptor and the Assyrian sculptor found no pretext to separate the head from the body. No isolated heads or even busts, either in the intaglios of their metal seals or in those of their cylinders. On the contrary in Greece, this conventional idea was suggested to the artist by even the data of the programme that he had to draw, from the day when he was required to contribute to the success of the new invention. He had very quickly understood what was the motive best suited to the area that he had to fill; he knew how to manage

[illegible]

excellish their preferred type. In the course of the apparent-
result that would last more than a century, they exerted [illegible]

[illegible]

erve to the modeling all its accuracy and also all its delica-
cy, even in the very slight projection that suited the [illegible]

[illegible]

rendering the lines of the face, by light and almost impercep-
tible touches of the tool. These workshops of the engravers of
coins were like a school where he was more left to himself [illegible]

[illegible]

profession, and in learning to perfect the difficult art of r
relief.

These heads of men or of women furnished the engravers of G
Greek coins the motives of which they made most frequent use
in all times; but they also had too inventive a mind to adhere
to a single series of images. In monumental sculpture in Greece
the sculptor had submitted to the form of the pediment and the
metope the figures that he had to place there, to group and [illegible]

[illegible]

engraver did not show himself less skilful in utilizing the
field of the little round area, where must be inscribed the t
type that the city had chosen for its coinage. See what arran-

[illegible]

allowed him to the limit of the contour, he did this with tw
figures facing each other, standing or leaning toward each oth-

[illegible]

vr (Pl. IV, 16, 20; coins of Thasos and of Lete); also two women
who lift an amphora (Pl. VI, 1), an uncertain city of Thrace).

[illegible]

it is a Hermes with caduceus in hand leading two oxen to sacri-

[illegible]

5, coin of the Derrones). There is again a lion springing on

[illegible]

indicated does not always imply this complication of the image.

and to vary its effects. The trouble that he took for that purpose did not fail to aid the progress of Greek sculpture. From generation to generation, these good workmen with the graver applied themselves with patient persistence to diversify and embellish their preferred type. In the course of the apprenticeship that would last more than a century, they exerted themselves in heightening the charm of the female face by the elegance of the jewels and of the coiffure. They learned to preserve to the modeling all its accuracy and also all its delicacy, even in the very slight projection that suited the monetary effigy; they came to passing from one plane to the other in rendering the lines of the face, by light and almost imperceptible touches of the tool. These workshops of the engravers of coins were like a school where he was more left to himself than elsewhere in imitating all the refinements of the wisest p profession, and in learning to perfect the difficult art of r relief.

These heads of men or of women furnished the engravers of G Greek coins the motives of which they made most frequent use in all times; but they also had too inventive a mind to adhere to a single series of images. In monumental sculpture in Greece, the sculptor had supplied to the form of the pediment and the metope the figures that he had to place there, to group and s set them so that they should appear to move at their ease. Our engraver did not show himself less skilful in utilizing the f field of the little round area, where must be inscribed the t type that the city had chosen for its coinage. See what arrangements he adopted. When he desired to fill the entire space allowed him to the limit of the contour, he did this with two figures facing each other, standing or leaning toward each other. AAcertain nymph defends herself from the embrace of a satyr (Pl. IV,16,20).coins of Thasos and of Lete); also two women who lift an amphora (Pl. VI, 17, an uncertain city of Thrace). Further, the same result is obtained in another fashion. Here it is a Hermes with caduceus in hand leading two oxen to pasture, or indeed a horseman armed with two spears and advancing to the right (Pl. IV,26; coin of Alexander I of Macedonia; IV, 8, coin of the Derrovians). There is again a lion springing on the rump of a bull (Pl. IV, 2; coin of Acanthos); but the theme indicated does not always imply this complication of the image.

[illegible]
[illegible]
developed its width by bending the knees and the movement of
[illegible]
is the flying Nike (Pl. IV,1; Elis). Even the figure of a man
[illegible]
[illegible]
end his arms and to suspend from one of them a drapery that
across the legs (Pl. VI, 12; Poseidonia). Further, the person
with the same pose of a combatant ready to strike, the
[illegible]
[illegible]
mal with the worship rendered to that god (Pl. VI,6; Caulonia).
Finally, if any motive seems to present itself to occupy this
[illegible]
winged horse (Pl. V, 19; Eirris). Sometimes if represented at
larger scale, the forepart of the animal suffices to fill the
[illegible]
[illegible]
the river which waters their fields (Pl. VI,10; Gela); Although
-n of smaller size, the bird succeeds in playing this part
[illegible]
5; Elean), or placed on the ground, it extends its head towa
the edge of the coin and toward the other extremity the gro-
[illegible]

On most of these coins, the effigy comprises only one isola-
ted figure, at most we have found there a small number of typ-
es showing us two figures facing each other, or the tradition-
[illegible]
companion or steed. The engraver has taken these very simpl
[illegible]
him to dare more. His first idea was then to place around the
[illegible]
relieved the eye of the spectator from the sensation of a void.
On a Sicilian coin, four dolphins appear to frolic around the
[illegible]
great the spacious field of the tetradrachma and of the decadr-
[illegible]
he soon became bolder and knew how to adopt themes, which with-
out parasitic additions sufficed in themselves to fill the em-

the artist was not embarrassed in obtaining the desired effect with a single figure. To that figure he gave the attitude that developed its width by bending the knees and the movement of the torso thrown forward. Such is the Hermes running; also such is the flying Nike (Pl. IV,1; Elis). Even the figure of a man standing and nude with some skill could be made to occupy sufficient width to appear well in its place; it sufficed to extend his arms and to suspend from one of them a drapery that a aided the image (Pl. VI, 18; Poseidonia). Further, the person with the same pose of a combatant ready to strike, the chlamys being lacking; but before Apollo the artist has placed a walking deer beneath his left arm; certain myths connect this animal with the worship rendered to that god (Pl. VI,6; Caulonia). Finally, if any motive seems to present itself to occupy this post, it is that of a passing quadruped, a lion, boar, bull or winged horse (Pl. V, 19; Siris). Sometimes if represented at a larger scale, the forepart of the animal suffices to fill the field. That is the case of the bull with human face that several cities have placen on their coins, to represent as deified the river which waters their fields (Pl. VI,10; Gela). Although of smaller size, the bird succeeds in playing this part without disadvantage, either flying with extended wings (Pl.IV, 3; Eleon), or placed on the ground, it extends its head toward one edge of the coin and toward the other straightens the group of the great feathers of its tail (Pl. VI,12; Himera).

On most of these coins, the effigy comprises only one isolated figure, at most we have found there a small number of types showing us two figures facing each other, or the traditional type composed of a man or an animal that serves him as a companion or steed. The engraver has taken these very simple images, then the increased diameter of the coin has induced him to dare more. His first idea was then to place around the principal type slender figurines symmetrically arranged, which relieved the eye of the spectator from the sensation of a void. On a Sicilian coin, four dolphins appear to frolic around the head of Arethusa (Pl. VI,1,2; Syracuse). When the engraver must treat the spacious field of the tetradrachma and of the decadrachma, he commenced by multiplying the accessories there; but he soon became bolder and knew how to adopt themes, which without parasitic additions sufficed in themselves to fill the en-

entire surface of the blank. On a coin of Syracuse that its s sunken square of its fabrication allows it to be referred to the 6 th century, one already sees appear this group of the c chairot harnessed with two horses (Pl. VI,3;Syracuse), that on the coins of that city will later become a beautiful quadriga drawn with vivid charm by spirited coursers (Fig. 55). The motive was found. To make it a masterpiece, adult art only had to develop it, to carry into the execution of the image the noble ease of a purer and broader style.

Where could it find these types , that being impressed on t the ingot of metal conferred on it such elevated dignity, these types in which the city personified itself? What was the principle of this selection and what rules governed it? To reply to that question, it is not necessary to survey the long series of Grecian coins; it suffices to remember the importance of the part that religion played in all societies of the ancient world, in their primary form. By the empire that religion exercised over all the thoughts and acts of the men of that time, one could explain all the institutions of the ancient city. In these conditions, what other images could the magistrates have dreamed of placing on the public money than those of the divine protectors of the city, of those gods that it constantly endeavored to secure their favor by the rigorous observation of t the rites, and by the prodigality of the dedications and sacrifiles? Doubtless on the first coins, on the Lydian and Ionian pieces was placed any figure, the head or body of an animal, an artificial monster. This mark sufficed to define the official character of the piece stamped by the State; but when the engraver felt himself more at ease, more a master of his graver, the themes changed in character. In various ways, some showing us the image of a certain deity, others recalling by an allusion or an emblem the memory of the god or goddess, the types represented on the coins agree in recalling one of the traditional cults of the city, most frequently that of those local religions, that have placed their deepest roots and have taken most hold on the souls of the people.[1]

Note 1.p.81. Because of the religious character of these t types, Ernest Curtius has gone so far as to suppose that these first coins in Ionia were struck in the temples themselves, w with ingots of metal deposited there.(E. Curtius. Ueber den

religiosen Charakter des griechischen Münzen, in Monatsheften of the Academy of Berlin. 1869. p. 465-481. The appearance of these coins is not of a nature to confirm this hypothesis. The types have nothing that suggests the idea of coining originated in the enclosure of a temple.

In what might be termed the incunables of numismatics are f found but a very small number of these types, where the engraver seems to have taken as models statues of the cult. Such are the Apollo of Caulonia (Pl. VI,6) and the Poseidon of Poseidonia (Pl. VI,18). Again, such is this Dionysos who holds a cup in one hand and in the other a vine branch.[2] In the island of Cyprus, it is a Hercules armed with bow and quiver.[3] At Tarente it is Taras, who rides a dolphin (Pl. IX,1,3). Below him a marine shell determines the location of the scene. The border of the coin with its guilloche perhaps recalls the cable of the ship that brought Taras and the first colonists across the always agitated waves of the Ionian sea. Cities revere their eponymous heros as their divine founders.

Note 2.p.81. Gardner. Types. Pl. I, 5. Uncertain city of Magna Grecia.

Note 3.p.81. Gardner. Types. Pl. IV, 21.

More frequently at that epoch, for reasons of esthetics and of suitability for the area, the deity whose effigy must give the coin a religious character is only represented on it by a head, which is then seen in profile. In many cases, this head is defined by the entirety of its features, by its coiffure and by certain attributes. How could one not recognize at first view the head of Hercules in a bearded head, covered by a lion's skin (Pl. VII. Dicea. Coin of Dicea) and that of Dionysos in another head, bearded and crowned with ivy (Pl. VI, 12; Naxos), that of Athena in the head with helmet, that decorates all the coins of Athens (Pl. V,7,9; Athens)? It is sometimes difficult to give a name to many of these images, to those elegant heads of young women, where the artist has pleased to encircle by o one or two little bands the abundant hair, whose wavy locks c curl on top of the head and fall on the nape in a dense mass. (Pl.VI,11; Velia). Is this Aphrodite that he desired to represent, or rather is it one of those nymphs in which the sculptors also loved to personify the rivers and sacred fountains? What in some places allows numismatists to name with all prob-

probability certain of these indeterminate effigies,,is what he knows of the local religions by the evidence of ancient authors. Since men commenced to strike silver in Sicily, until the day when the monetary art attained its climax, Syracuse n never ceased to place on its coinage a female head, that in i its entirety always retains the same appearance, but which the ever increasing skill of the engraver makes more and more noble and charming. In the type to which this great city remained so faithful, men agree in seeing the ideal image of the naiad Arethusa, the benefactress that one could almost call the nurse of the city. Corinthian colonists came with Archias and deified the beautiful and fresh fountain. At the inexhaustible flow of its limpid waves, they must have been able to establish themselves, and at need to enclose themselves without ever fearing the lack of water on that island of Ortygia, which commanded the entmance to the best natural harbor in all Sicily. Syracuse grew very rapidly and soon extended on the adjacent main l land, where it found rivers and fountains to its content; but the impression först received no less remained, perpetuated by myths accredited by the inventions of the poets and by a cult, that always remained very popular. Here is then no possible doubt; but in a similar case, one is sometimes embarrrassed to choose among several appellations appearing equally p plausible.

The numismatist would then be frequently embarrassed if asked to name each of these female heads that decorate one face of so many Greek coins. The difficulty is less for male heads, that are generally better defined by the design of the face a and the arrangement of the coiffure; but whether one or the o other is concerned, he can resign himself to this uncertainty. For the coins of cities whose histories are best known to us, usually the name is quite easily supplied, when the engraver has neglected to inscribe it beside the type. As for those less numerous, when for lack of information, one is compelled to omit any precise designation, the types decorating them are too entirely similar to those of the pieces of the first class, f for one to hesitate in attributing to them the same character.

These effigies of gods and goddesses are not alone in attesting the vigor of the impression, that the religious idea has made on Grecian coins. Likewise by the intervention of this

of plants or of various objects, that occupy on the face the place usually assigned to figures of men or women. In most cases are recognized either an attribute of a certain deity or a monster, a stag, bird or insect, that the old myths give him as a habitual companion, or the victim most commonly sacrificed on his altars. Thus at Chalcis the lyre forms a pendant to the beautiful head of Aprool on the other side. Elsewhere the tripod suffices to recall the prophetic power of the god of Delphi, whose oracle presided at the birth of the city. The owl appeared on the reverse of all coins of Athens. The popular imagination very early gave this bird that sees in the night as associate of the goddess Athena, whose penetrating eye pierces the darkness of the obscured sky. Athena, daughter of Zeus who launches the thunderbolt, perhaps originally personified the lightning.[1] An olive branch on the field recalls the gift that Attica received from her divine protectress.

Note 1.p.83. On the true sense of the word glauchopis, the traditional epithet of Athena, see Decharme, Mythologie de la Grece antique, p. 75, note 4.

Sometimes, by an ignorance of all the detail of local myths, we are unable to render a reason for a relation of this kind, pointed out to us by the examination of a series of coins. For example, see the coins of Ephesus. One readily finds on the m most ancient electrum coins and on silver pieces of the 4 th century the type of the deer, and in all times that of the bee. (Pl. VII,3). For the stag there is no difficulty; Artemis, the great goddess of Ephesus was the "mistress of wild beasts.' S She pursued the stag through the thickets and pierced it with her arrows; but why the bee? On the supports of statues representing the great goddess of Ephesus are figured bees with the stag and other animals;[1] but these statues date from a very l late epoch, and they do not inform us concerning the nature of the bond that the myths and the rites of thes worship established in the most distant times between this insect and the oriental divinity, which the Ionian colonists identified with their Artemis, when they fixed themselves at the mouth of the Meander. To explain the choice of this emblem, men explain that the priestesses of Artemis bore the name of bees;[2] but if more than one ancient text bears witness that in various places the priestesses of Demeter were so called,[3] there is not one that

attests the use of the same name for the priestesses of the Ephesian Artemis.[4] In the inscriptions, they are mentioned under the generic name of hierai,[5] and Strabo employs the word virgins to designate them.[6] Perhaps it is necessary to confess that we are ignorant of the reasons that the Ephesians adopted this symbol, and were faithful to it for long years.

Note 1.p.84. Alabaster statue in the museum of Naples (Roscher's Lexicon, col. 588). Marble statue of the Vatican (Barclay Head, Coinage of Ephesus, No. 494).

Note 2.p.84. Babelon. Traite. Part II. Vol. I,p.276. Also s see Arthur B. Cook. The tree in Greek mythology (Jour. Hell. Studies. Vol. XV. 1895. p. 1-4).

Note 3.p.84. Pindar. Schol. ad pindar. IV. 104. See Hesychius, also Callimachos, Hymns, II, 110-112, Porphyre, de antro nympharum. XVIII.

Note 4.p.84. The sole evidence that can be invoked is a verse of Eschylus, belonging to a lost piece,"the priestesses," mentioned in a scholium of Aristophanes (Frogs, verse 1274;Greek).

This verse might be interpreted in the following fashion:- "keep silent; those who direct the melissai (bees) are ready to open the temple of Artemis." This refers to an exhortation addressed to the faithful that await beneath the porticos the hour of sacrifice, and the melissonomoi would be the neocoves, more particularly the megabyze, who we know were charged with the oversight of the priestesses at Ephesus; but in spite of the mention of Artemis, it is not certain that Ephesus was the place of the scene of the drama of Eschylus.

A gloss of the Etymologicum magnum (see Essen) adds in more certainty. The existence of the Ephesian melissai (bees) then remains a matter of pure conjecture.

Note 5.p.84. C. I. G. 2986.

Note 6.p.84. Strabo. XIV. p. 641.

We could cite many other examples of these accessory types thus added to or substituted for the superior types, to those that borrow from the human figure the traits employed to lend a visible form to one of the aspects, under which the Greek mind had conceived the acts of the mysterious powers that govern the world. Thus at Argos the Lycian Apollo is represented by a wolf (Pl. VIII, 11). The Greeks had lost sight of the true sense of an epithet certainly connected with the root luc,

from which are derived in their language as in Latin a number of words expressing the idea of light. The two words Lychios and lychos sounding nearly the same to the ear, they had established between them an entirely arbitrary relation, on the faith of which they had made the wolf the emblem of the cult that received Apollo, where piety honored him under that name. At Carpathos a dolphin recalls the memory of Apollo Delphinios, and at Teos, a griffin that of the myth according to which Apollo left Greece in the last days of autumn, to pass some months among the Hyperboreans until the return of spring, beyond the Balkan mountains, from which the blasts of Boreas fall on the plains of Thrace. That distant and mysterious region had not known the rigors of winter.[1] It was believed, that there the griffins disputed with the fabulous Arimaspes the gold that abounds in the northern countries of Europe.[2] At Miletus, whose patron was Apollo Didymus, the emblem on the coin is the lion. Apollo, as evidenced by the most transparent of the myths concerning him, is a solar god and the image of the king of carnidota was most appropriate to recall the devouring ardor of the summer sun.[3] The Greeks of Asia had perhaps borrowed this symbol from the artists of western Asia, as they had done for many other motives. It was again a borrowing of this kind, that must be recognized in the type of the coins of Acanthos, where is seen a lion devouring a bull.(Pl. IV.2). The lion would again be the sun that inhales and absorbs the water. This would be represented by the inhabitant of damp and grassy meadows, the bull.

Note 1.p.85. Pean of Alceus analyzed by the rhetor Himerios. (Orationes XIV,10). Theognis. 775-779.

Note 2.p.85. Herodotus. III, 116; IV, 13, 27.

Note 3.p.85. Macrobius. Saturnales. I, 21, 16-17; Elien,De natura animalium. XII,7. Cumont has gathered the texts which prove that the lion was regarded as a personification of the solar heat. (Textes et monuments relatifs au culte de Mithra. Vol. I, p.101-102).

We have mentioned some of the types on the coins of cities taken in different regions of Greece, that correspond to the diversity of the rites of the religion of Apollo, and to those of the names under which he was invoked as a god always the same. It would be easy to establish series of the same kind f

for the other great Hellenic deities. In the multitude of Greek coins, such is at least for the first age the predominance of types, that are the more or less direct expression of a religious thought, that one feels it right to base on analogy, to attribute the same character to many types, whose true signification had not been fully seen at first. For example, see this shield with two notches that for more than two centuries is repeated on the coins of Thebes and of several other cities of Beotia. (Pl. VIII, 19). Beotian shield, say all the manuals, and it is thought unnecessary to add to that brief description. It is p possible that a shield of this form may have been in use in t that country when this type was adopted; but is it probable t that the equipment may never have been modified among that nation of soldiers? Is not the singular persistence of this type better explained, if it be admitted that here must be seen the shield of Hercules, the preeminent Theban hero? When the hollow square vanished from Theban coins, the types that became p pendants to the shield were Hercules as an infant strangling the serpents, beiding his bow or carrying off the tripod of delphi, etc.[1] Hercules is everywhere on the Beotian coinage i in different postures. It would be the same in the cult of Poseidon Hippios, that alludes to the horse which is the most common type of the reverse of Thessalian coins. With a stroke of his spear, the god has caused a spring to stream from the rock, from which comes a spirited horse, the ancestor of the breed that still supplies its best mounts to Grecian cavalry.[2] On the face of the same piece, a young man subdues a bull. (Pl. IV,7;Larissa). The hero Thessalos, it is said. Why not rather recognize Jason there, the national hero of Thessaly, Jason in combat with the bull with brazen feet, that he could force to bend beneath his yoke? The single sandal of Jason, t the hero with but one foot shod that figures in the field of the coinage of Larissa.[2]

Note 1.p.86. P.Gardner. The types of Greek coins. Pl. III,44-48.

Note 2.p.86. (Latin). Lucan. VI, 393.

Note 3.p.86. Babelon. Traite des monnaies grecques.Part II. Vol. I, p.1012.

We could justify this mode of interpretation by a number of other examples taken almost at random; so without insisting farther, we shall limit ourselves to calling attention to a

group of types, which at first sight might not a[illegible]
the same character. We mean the types called agonistic, [illegible]
representing one of those chariots drawn by one, two or four
[illegible]
What they commemorate is one of those victories sung by Sim-
onides and Pindar, a victory won at Delphi or Olympia, on the
[illegible]
Olympia the prize of the race of mules, he caused a chariot to
be engraved on the coinage of Rhegion, and on that of Messana
[illegible]
two cities). Likewise Gelon placed on his coinage at Gela and
Syracuse the image of a chariot drawn by four horses, to which
he owed at Olympia that crown which aroused the most lively a
appreciation (Pl. VI, 3, 4). The Nike flying above the horses
is a clear allusion to that victory, whose date of 488 is giv-
en by Pausanias. Hiero, brother and successor of Gelon, made
himself illustrious by victories of the same kind, that he
[illegible]
the absence of the motive supplied, passed from the coins of
Syracuse to those of several other Sicilian cities under th-
influence of their tyrants.

Note 1.p.57. Pausanias. VI, 9-4.

Doubtless the pride of the triumph was for much in the ac
of these princes desiring coinages, when they thus enrolled in
the service of their glory the artists charged with engraving
their coinage; but there was also something else in the feel-
ings that dictated the adoption of agonistic types and in th
popularity enjoyed by them. This was not only the desire of t-
[illegible]
ose on themselves the fatigue of professional training, and t
the nobles and princes to pay the cost of a racing stable, to
raise blooded horses that must be transported to Olympia at [illegible]
[illegible]
were harnessed. In subjecting themselves to these expenses and
efforts, only rewarded by the success of a small number of con-
[illegible]
seidon, in whose honor these games had been established [illegible]

group of types, which at first sight might not appear to have the same character. We mean the types called agonistic, those representing one of those chariots drawn by one, two or four horses, which contest the racing prize in the great games of Greece. On the meaning of these images is no possible doubt. What they commemorate is one of those victories sung by Simonides and Pindar, a victory won at Delphi or Olympia, on the isthmus or at Nemea, by a citizen or the prince of the city t that struck the coin. When Anaxilas, tyrant of Rhegion, won at Olympia the prize of the race of mules, he caused a chariot to be engraved on the coinage of Rhegion, and on that of Messana a chariot to which was harnessed a mule,(he reigned over the two cities). Likewise Gelon placed on his coinage at Gela and Syracuse the image of a charioh drawn by four horses, to which he owed at Olympia that crown which aroused the most lively a appreciation (Pl. VI, 3, 4). The Nike flying above the horses is a clear allusion to that victory, whose date of 488 is given by pausanias. Hiero, brother and successor of Gelon, made himself illustrious by victories of the same kind, that he recalled in the same manner, of this type, very tasteful from the elegance of the motive supplied, passed from the coins of Syracuse to those of several other Sicilian cities under the influence of their tyrants.

Note 1.p.87. Pausanias. VI, 9-4.

Doubtless the pride of the triumph was for much in the act of these princes desiring praises, when they thus enrolled in the service of their glory the artists charged with engraving their coinage; but there was also something else in the feelings that suggested the adoption of agonistic types and in the popularity enjoyed by them. This was not only the desire of obtaining satisfaction of vanity, which decided athletes to impose on themselves the fatigue of professional training, and t the nobles and princes to pay the cost of a racing stable, to raise blooded horses that must be transported to Olympia or D Delphi, with all the men charged with caring for them, and of guiding to the goal in the arena the chariot to which they were harnessed. In subjecting themselves to these expenses and efforts, only rewarded by the success of a small number of competitors, for which homage was rendered to Zeus, Phoibos or Poseidon, in whose honor these games had been established by the

successors of the Hellenic race. To represent on the public [illegible] [illegible] [illegible] gence shown by a certain god of Olympus to the city, when he h this placed above all the sons of that city, who had gone to represent it in those great meetings of the national sport. [illegible] [illegible] aroused and grateful piety.

As for the living portraits that are admitted on the coins of the kings succeeding Alexander, we do not have to speak of them here. From the 6 th to the 4 th centuries, no prince or tyrant, [illegible] er, was permitted to place his own effigy in the field of the coinage struck by him. The gods alone had rights to this field. To dare to substitute for their image or the emblems recalling the worship rendered to them, the image of a mortal would seem an impropriety and almost an impiety. When by the conquest of Asia and the creation of the great Macedonian monarchies, the Grecian world was transformed, royal effigies were placed on the coinage by favor of a sort of compromise and as if by a ruse. the change sought and the pretext therefor was fou- [illegible] or as Zeus Ammon. This these accustomed minds and eyes to see the head of a king replace on coins that of an inhabitant of [illegible]

[illegible] Greek people and the myths connected therewith, proceeded the [illegible] this rule had no exceptions would go beyond measure. There is a certain series of types that cannot be really explained in that way without an excess of subtility. We mean those which are figured translation of even the names of the cities, by which were struck the coins bearing them. Thus Selinonte has for a secondary type a leaf of parsley (selinon); Rhodes [illegible] [illegible] (uncus), Zancle a sickle (in the language of the Sicules, [illegible] [illegible]. It has been desired to suppose that myths or local rites gave the reason for the choice of these types; but the two last

ancestors of the Hellenic race. To represent on the public money one of these victories, whose fame echoed to the most distant colonies, was to prolong this homage, to note the beneficence shown by a certain god of Olympus to the city, when he had thus placed above all the sons of that city, who had gone to represent it in those great meetings of the national sport. T The crown so obtained was the gift from the deity. The artist whose graver perpetuated its memory was the interpreter of an aroused and grateful and grateful piety.

As for the living portraits that are admired on the coins of the kings succeeding Alexander, we do not have to speak of them here. From the 6 th to the 4 th centuries, no prince or tyrant, whatever reason he had to be proud of his exploits and his power, was permitted to place his own effigy in the field of the coniage struck by him. The gods alone had rights to this field. To dare to substitute for their image or the emblems recalling the worship rendered to them, the image of a mortal would have seemed an impropriety and almost an impiety. When by the conquest of Asia and the creation of the great Macedonian monarchies, the Grecian world was transformed, royal effigies were placed on the coinage by favor of a sort of compromise and as if by a ruse. The change sought and the pretext therefor was found in the image of the deified Alexander, coiffed and disguised as Zeus Ammon. This image accustomed minds and eyes to see the head of a king replace on coins that of an inhabitant of Olympus or of a local deity, a hero or a nymph.

For the earlier period, from the religious beliefs of the Greek people and the myths connected therewith, proceeded the types of the coinage. The fact is constant; but to pretend that this rule had no exceptions would go beyond measure. There is a certain series of types that cannot be really explained in that way without an excess of subtility. We mean those which are the figured translation of even the names of the cities, by w whom were struck the coins bearing them. Thus Selinonte has f for a secondary type a leaf of parsley (selinon); Rhodes has a rose (rhodon), Melos a pomegranate (melon), Phocea a seal (phocne), Zancle a sickle (in the language of the Sicules, zachlon signifies sickle),[1] Ancona an arm bent at the elbow (agkon). It has been desired to suppose that myths or local rites gave the reason for the choice of these types;[2] but the two last

examples cited will suffice to show what is forc[illegible]
ry when carried to an extreme. The bent arm of the coin of
Ancona is nothing but a pun, as we should say. The sickle on
the oldest coins of Messine (Pl. IX,4) represents the c[illegible]
the coast, where in spite of earthquakes will aways [illegible]
[illegible]
product of the soil of the country over which reigns the city
[illegible]
ear of wheat on the back, a sign of fertility of the territory
[illegible]
of Cyrene appears the image of a plant, that can only be the
[illegible]
and seeds were exported by Cyrene into all Greece, and used in
[illegible]
that were formerly termed [illegible] in the language of numismaty),
[illegible]
by recalling a trait characteristic of the local landscape, t[illegible]
they aroused at once a precise idea in the mind of the specta[illegible]
[illegible]
the piece offered to him, knew what city had struck it. This
[illegible]
the temptation to use it, when they found it possible in some
way. Gods and myths had nothing to do with that affair.

Note 1.p.68. *Thucydides. VI. 4.*

Note 2.p.68. P. Gardner. *Types of Greek Coins.p.44-45.*

We have insisted on types. By their images in relief they
depend on statuary; they are works of sculpture. Particularly
[illegible]
alone, that coins interest the historian of art. By the diver-
sity of their themes and by that of their execution, these ty-
pes differentiate the coins, give each of them certain charac-
[illegible]
struck at a different time, and even more clearly from coins
issued from some other mint in another province of Greece. Th-
ese variations in the repertory and style do not escape the
taste of a connoisseur. Provided that the coin is well preser-
[illegible]
proximation. But when he would establish the series of succes-
[illegible]

examples cited will suffice to show what is forced in that theory when carried to an extreme. The bent arm of the coins of Ancona is nothing but a pun, as we should say. The sickle of the oldest coins of Messina (Pl. IX,4) represents the curve of that coast, where in spite of earthquakes will aways rise a g great city, whose spacious port will receive the ships that pass through the strait. Elsewhere, other types recall some p product of the soil of the country over which reigns the city that issues the coinage. On the coins of Metaponte are seen an ear of wheat on the back, a sign of fertility of the territory of that rich city (Pl. IX,7). At the same place on the coins of Cyrene appears the image of a plant, that can only be the silphium, a shrub only growing in Africa, whose roots, leaves and seeds were exported by Cyrene into all Greece, and used in perfucery and medicine (Pl. VII, 22, 23). All these types are what were formerly termed amayns in the language of heraldry, or canting arms. They were well named, by a play on words or by recalling a trait characteristic of the local landscape, t they aroused at once a precise idea in the mind of the spectator. Even before reaching the legend, one whose eye fell on the piece offered to him, knew what city had struck it. This procedure presented too many advantages for cities to resist the temptation to use it, when they found it possible in some way. Gods and myths had nothing to do with that affair.

Note 1.p.88. Thucydides. VI. 4.

Note 2.p.88. P. Gardner. Types of Greek Coins.p.44-45.

We have insisted on types. By their images in relief then depend on statuary; they are works of sculpture. Particularly by that name, one could almost say that it is by that title a alone, that coins interest the historian of art. By the diversity of their themes and by that of their execution, these types differentiated the coins, gave each of them certain characters distinguishing them from other pieces from the same city, struck at a different time, and even more clearly from coins issued from some other mint in another province of Greece. These variations in the repertory and style do not escape the t taste of a connoisseur. Provided that the coin is well preserved, he will date it at the first glance with a sufficient approximation; but when he would establish the series of multiple issues from a certain mint always remaining faithful to the

same type, he must introduce other indications. We refer to all the little figures scattered in the field, where they do not at first attract attention, being placed above, below or beside the principal type. These are what have been termed symbols, quite improperly.[1] A more correct idea would be given by calling them marks op different coining officials. They represent there the magistrate in each city placed over the fabrication of the coinage. It is possible that they frequently reproduced the impression of the intaglio, which served him as a personal seal, like his signature.

Note 1.p.90. P. Gardner. The Types etc. p.53.

Of these differences and the part played by them, there cannot be given a better example that that furnished by the coins of Metaponte. All have on the back an ear of wheat; but one sometimes sees a grasshopper climbing the awns of the wheat, (Pl. V,4), and sometimes a bird posed on a leaf that falls from the stem. Elsewhere is in the same place a fly, a mouse or some other little animal. What these marks signify and teach us is, there are at Metaponte beneath the leaf bearing the bird the three letters A M I, the initials of a magistrate's name.

Abdera in Thrace, an Ionian colony, early attained great poosperity because of its location at the mouth of the Nestos. Its coinage is very rich and much varied, for the end of the 6 th and the entire 5 th centuries. The magistrates of the city, as if to assure more guarantees to those to whom this money was offered, were compelled to inscribe their names earlier and more regularly than elsewhere, at first by simple initials, then soon afterwards with all the letters, sometimes in the n nominative and sometimes in the genitive with the preposition epi. This name is there accompanied by a mark varying with each signature, and these marks seem to allude to the meaning of the name borne by the magistrate signing the piece. On one of these coins, beside the name of Python is seen the tripod of Apollo Pythios; on another signed by Nicostratos, a warrior charges the enemy; elsewhere near the name of Molpagores is a female dancer, and near that of Enagon is one of those amphoras, that filled with oil or wine, were given as a prize in certain games. In the same fashion on a coin of Neapolis, near the name of Artemi(doros ?) is a figure of Artemis.

The long series of staters of Gyzicus present an interesting

peculiarity. The engraver has reversed the relation existing on other Greek coins between these marks of the magistrate and the type representing the city. This at Cyzicus is the tunny, as an emblem having been in memory of the fisheries which it carried on in the Propontis. Many were salted and exported, as now done with us in Brittany by the ports of Douarennez and of Concarneux. The tunny appears on allits coins; but it occupies only a subordinate place; it is of quite small dimensions there. What extends in the field and entirely fills it is a type varying from one issue to another, that chosen by the coining magistrate in office to indicate his personal intervention. On these pieces the engraver has sometimes attached the tunny by any artifice to the principal image. On a stater, he has placed it in the hand of a winged goddess, that holds it by the tail; but more frequently, he is satisfied to place it somewhere in the field, beside or below a personage drawn at a much larger scale (vignette at end of Chapter). It does not seem that the example given by Cyzicus was followed by any other Greek city.

There are also found on the field of a coin marks of another kind. These are sometimes sunk, more frequently in relief, images so small that it is often necessary to look at them with a lens to see the design properly. They should not be confused with the emblems in which we have recognized the symbol of the magistrate and the equivalent of his signature. They do not c combine with the principal type, like those in more than one case. This is because they were not made on the metal at the same time as that type. They were engraved only after striking the coin, by means of very fine punches that may be compared to the punches of our goldsmiths, or to those serving to control the coinage and to guarantee the grade of the silver and that of jewels of gold and silver. These are what are called countermarks. Their use is always perpetuated, and they appear very early in certain series. "Thus they are already found on the primitive pieces of electrum, coined before Croesus in the cities of the western coast of Asia Minor. One third of the s staters of electrum with the type of the lion's head in profile, probably struck at Miletus in very remote times, are most frequently covered on face and reverse by little countermarks, so delicately punched as not to change the type itself of the piece. There are found on the same example 7, 8 or sometimes even

.2 different countermarks, representing the head of a boar, two crescents back to back, a bull's head, a bird, the tennis bat and various other signs scarcely defined by words. The Persian drachma or Median silver shekel is sometimes stamped by similar punches. Apparently these countermarks were placed by bankers and changers in whose hands these coins circulated; those handlers of gold and silver added for the benefit of their clients their special guarantee to that of the State, that issued that money. Thus today also in China bankers place their countermarks on foreign coins, that commercial movements bring to their counters. " [1]

Note 1.p.92. Babelon. Traite. Par. I, vol.I,p.642-643.

Other uses were also made of these countermarks. States were led to use them under the pressure of temporary necessity, to give a new circulation to worn or demonetized coins, or to accredit foreign coins in a country. Numerous coins of Grecian cities of Cilicia, contemporaneous with the rule of the Achaemenide princes, have come to us countermarked by various symbols or by Aramean letters. One can believe that these countermarks were made by satraps and other Persian chiefs, who in t the 4 th century had in Cilicia and Pamphylia the headquarters of their armies and their fleets; by adding these signs, these coins became fit for the paymeyt of their troops of land and sea.[2] To free themselves from the cost of fabrication, certain cities by that artifice sometimes gave a legal currency to coins of a neighboring city or of a prince, whose coinage was i issued in great abundance and found a good reception on the international market. This was done for Macedonian monew of s several cities of eastern Greece. A drachma of Alexander is s struck by a countermark bearing the type and initials of Byzantium.[3] Elsewhere these countermarks seem to be evidence of an attempt made in some regions of Greece to create a sort of federal coinage.[4]

Note 2.p.92. Babelon. Vol. I. p. 644.

Note 3.p.92. Daremberg-Saglio. Dictionnaire. Fig. 4044.

Note 4.p.92. Babelon. Vol. I, p. 645-646.

The types, mint marks and countermarks represent the part t taken by the arts of design in the execution of the coinage. While the die has not made its impression on the blank, that

that is only an ingot; with the appearance of the type is born a coin. From that moment, this can fulfil its office without any other element of determination. This is proved by going back to the earliest coins of Lydia and of Greece. We see no trace of letters there. At the end of a certain time, perhaps half a century, is felt the need of a more precise determination. They thought of indicating on the coin the name of the c city issuing it. All confusion was thus prevented; men were no longer exposed to take for each other two coins from different sources with identical types. We know what city first gave out this type; but it was soon followed nearly everywhere. At the beginning the engraver felt no embarrassment when it was necessary for him to place this legend on the field. He began by o only placing there two or three letters, the initials of the name; then having become more skilful in using space at command, he ended by finding means to inscribe there this name w with all its letters. Still there were some cities that did n not wish to profit by this new skill of the graver; Corinth signed its coins only by a single letter, the koppa, which everywhere else had been dropped early. This unusual character sufficed to make its coinage recognized in the entire Adriatic basin, where it was in current use. So long as Athens counted in the Grecian world, it placed on its coins only the letters A Th E. These coins were current in the north, east and south of Greece, among half barbarous people; they did not like to be disturbed in their habits. Thus Athens held to conserving to its didrachmas and tetradrachmas as much as possible, the appearance in which they were formerly presented in those distant countries, and had found favor there. For the same reason, it scarcely authorized the engravers of its coins to follow t the progress of the art, even if quite distantly. On its coins the head of Pallas retained an archaic appearance even in the full 5 th century.

Where there did not exist motives of this kind to remain faithful to the old use of initials, what was usually engraved on the coinage was not the name itself of the city; it was the ethnic adjective derived from that, being on the coins of Syracuse, Syrachosiou, Syracusios, on those of Ephesus, Ephesion, Ephesions; on those of Thebes, Thebaion, Thebans, etc. Yet this rule has exceptions. On the coins of Agrigente is read the

name of the city, Akragas in nominative singular. It is the s same for Tarente, when it desired to see there the word Taras the name of the eponymous here, whose image is represented on the coinage or the name of the city. Sometimes, though rarely, this name is in the genitive; Akragantos, Zakynthoy. There are also examples of the ethnic in the nominative singular; Rheginos on a coin of Rhegion, Kydoniatas on a coin of Cydonie. Elsewhere is found an adjective terminated by a suffix that marks its dependence or appernainance. On some coins of Panormus, for the normal formula is substituted Panormikon, Panormic (money). The legend Arkadikon, Arcaidian (money) defines the federal c coinage in Arcadia. There may be cited as examples of exceptional and singular formulas on coins of Thracian kings the legends Kotyos charachter , of Scythia chomma; on Cretan coins of Gortyna and of Phaestos the legends Gortynon to paima, Phaistion to paima. Komma is derived from choptein, to cut, and paima, to strike.

In certain commercial cities, as soon as the coinage of money had become somewhat active, the magistrates charged with it did not delay placing on this coinage their personal marks, of which we have given many specimens; but they could not think of engraving their names only much later, when engravers had learned to write. Abdera was one of the first cities where they adopted this custom. From the middle of the 5 th century t they signed with their name the coins that they issued. In the 4 th and 3 rd centuries, a number of other cities adopted the same rule. That is why on a coin are sometimes found several names of magistrates, which recalls the coining triumphs of the Roman republic. As for the signatures of artists engraved in such fine characters, as first to entirely escape the attention of numismatists, we have stated that then appeared late and are very rare. It is the same with words written with all letters or abridged, that indicate the value of certain pieces. Likewise entirely exceptional on some coins of Magna Grecia a and of Sicily, where are found explanatory inscriptions analogous to those sometimes presented by vases. On the reverse of a coin of Pandosia is seen a nude young man, that holds in one hand a patera and in the other a branch of leaves; fish jump between his legs. It would seem that the last trait would have sufficed to give the sense that the engraver proposed to attri-

attribute to this image; but for greater clarity, he inscribed the word Krathis behind the back of the ephebe. This is the name of the river that waters the territory of Pandosia. Also is found the word Eypsas, the name of another stream on a coin of Selinonte. Elsewhere is an epithet giving the name under w which was adored in a certain city the god represented on its coinage. On a coin of Galaria is read the word Soter near Zeus enthroned with sceptre in hand, and on a coin of Crotona is t the word Oikistas,[1] behind a Hercules seated on a rock and armed with the club. Hercules was regarded as the founder of the city. On a tetradrachma of Syracuse, beneath the triumphal chariot in the great games, the engraver has represented an armor, whose presence on the reverse is explained by the word Athla, "prize of victory." Sometimes the legend indicates in what conditions the coin was struck. On a coin of the Sicilian city of Alaesa is the legend Symmachikon.[2] This is an abbreviation of the same formula found at Samos with the three letters Syn.[3] These coins were issued to circulate in several confederated cities. On the reverse of a coin of Miletus is this mention:- eg Didymion iore (drachma being understood). This drachma came from an issue made by the authority that administered the rich sanctuary of Apollo Didymus.[4]

Note 1.p.95. P. Gardner. Types. Pl. II, 1; V, 26

Note 2.p.95. The same. Pl. XV, 4.

Note 3.p.95. The same. Pl. XVI,5.

Note 4.p.95. The same. Pl. XVI,5.

On a stater of electrum with the type of a grazing stag, which was struck somewhere on the coast of Asia Minor, either at Ephesus or at Halicarnassus where it was found, is read this curious legend:- Phannos emi sema, I am the work of Phanes. (Fig. 56)[5] As proposed, is it necessary to recognize in this Phanes him, of whom Herodotus (VI, 4, 11) relates, that being chief of a body of Greek mercenaries in Egypt under Amasis, he betrayed the Pharoah to pass into the service of Cambyses and aid the Persians to conquer the valley of the nile? As a recompense for the service rendered, Cambyses established Phanes as tyrant in Halicarnassus, his native land. Or was not Phanes rather a banker, who issued these coins for the needs of the business relations, that he undertook with Lydia and with the cities of the coast, the adjacent islands and the Greek colonies

of Egypt? Rather this hypothesis appears to authorize the use of the word to sema, the mark. This would be the ornament of a private coinage, that in some places might have preceded a public coinage, and have suggested the idea of it. In this i Ionia where Grecian genius in the / th and th centuries displayed such marvellous activity, private men incited by the desire to gain might have thus preceded the State, and have b been the first to give the example of many useful innovations.

Note 5.p.95. Babelon. Traite. Part I. Vol. I, p.383. Barclay Head. Historia numismatica. p. 529.

[illegible]

[illegible]

[illegible]

of Asia were neither of gold nor of silver. They were made of that natural alloy of gold and silver supplied by the river sands and mineral veins of the rocks of Tmolus; but it was not [illegible] to be struck by the inconveniences presented by the coinage [illegible] -tal; but if it pleased the eye, it had the defect of leaving the merchant uncertain concerning the proportion in which th[e] each coin entered the more precious of the metals found associated there. Perhaps this merchant already knew how to test the [illegible] the Lydian stone by the Greeks. It would then seem that in [illegible] former give only very imperfect results; the ancients did not [...]ctise at command with the energy of those now employed for this purpose. This was what doubtless decided Croesus to take another method of separating the two metals by refining. He adopted a double standard for his coinage. He issued coins of gold and coins of silver, the Croeseios as the Greeks said.(Pl. VII,1,2). [illegible] coins of a good standard in all that region.

[illegible] [Gr]eek cities could not follow the example given them by Croesus. [illegible] [...]th century; but they were not able to concur in his gold coinage. Until the end of the Median wars, we shall not see any [illegible] were first the Croeseios and then the Darics. The kings of Per[sia] [illegible] disposed of an abundance of gold, which advised and allowed t[...] [illegible] self or in the territories outside Hellas as occupied by its colonists, mines that furnish this metal in abundance. The [...] [illegible]

Chapter XVI. Numismatics. History of Monetary Art.

1. Materials of Coinage in the course of the archaic Age.

The first coins circulated in the bazaars of the Greek cities of Asia were neither of gold nor of silver. They were made of that natural alloy of gold and silver supplied by the river s sands and mineral veins of the rocks of Tmolus; but it was not long required for wise merchants like the Lydians and Ionians to be struck by the inconveniences presented by the coinage of electrum. It showed more or less frankly the yellow tint of g gold; but if it pleased the eye, it had the defect of leaving the merchant uncertain concerning the proportion in which in each coin entered the more precious of the metals found associated there. Perhaps this merchant already knew how to test the grade of the metal with the touchstone. This stone was called the Lydian stone by the Greeks. It would then seem that in Lydia were discovered its properties, and that men had learned to use them; but this was lost time, and these essays could further give only very imperfect results; the ancients had no acids at command with the energy of those now employed for this purpose. This was what doubtless decided Croesus to take another method,of separating the two metals by refining. He adopted a double standard for his coinage. He issued coins of gold and coins of silver, the Creseids as the Greeks said.(Pl. VII,1,2). Thoes left memories that prove the eager acceptance of these coins of a good standard in all that region.

In spite of the advantage that they had found in it, the Greek cities could not follow the example given them by Croesus. They imitated him by nearly all renouncing electrum after the 6 th century; but they were not able to concur in his gold coinage. Until the end of the Median wars, we shall not see any Greek city coin gold. During that entire period the only gold coins current around the eastern basin of the Mediterranean were first the Creseids and then the Darics. The kings of Lydia and of Persia by the rich mines in their domains then alone disposed of an abundance of gold, which advised and allowed t them to coin it.[1] On the contrary, there was not in Greece itself or in the territories outside Hellas as occupied by its colonists, mines that furnish this metal in abundance. The Siphnians among them worked some veins of a mineral of gold.[2]

The Thasians had also found gold in the marble composing their island, and they derived a little more from the beds of Skapte Hyle on the adjacent continent, where they continued the work formerly begun by the Phoenicians.[3] Siphnians and Thasians had derived from their mining benefits sufficiently great, that t they were taxed, the Siphnians by exiles from Samos and the T Thasians by Persian satraps; but the few hundreds of talents that yearly left those galleries were insufficient to supply the needs of a very active circulation of money. Gold was very scarce in Greece. When some ostentatious tyrant like Hiero, to show luxury desired to order for some illustrious sanctuary an important work of the goldsmith, he had great difficulty to f find in the market for the artisan the necessary quantity of the precious metal.[4] After the 4 th century by the effect of the very close relation between the Hellenes and the Persian empire, this scarcity of gold was lessened; but gold came into current use in Greece in the mints only from the time that Philip of Macedon had made himself master of the auriferous lands of Mt. Pangeus, and started from it those waves of gold, that streamed into the Greek cities and there paid for the complicity, which concurred with the pikes of the phalanxes in triumphing over the resistance of Athens and of Thebes.

Note 1.p.98. The kings of Lydia derived their gold and electrum not alone from the auriferous sands borne by the torrents descending from the Tmolus. There must have been veins of the precious metal worked in Phrygia and Mysia. Those veins seem to have been alluded to in the tales current among the Greeks concerning Midas, that king of Phrygia, who changed into gold all objects touched by his fingers. The pseudo-Aristotle speaks of mines worked near pergamon for the account of Croesus, without naming the metal obtained; perhaps this was gold. As for the kings of Persia, they disposed of the product of mines situated in the interior of the Asian continent.

Note 2.p.98. Herodotus. III. 57.

Note 3.p.98. Herodotus. VI, 46-47; VII, 118.

Note 4.p.98. Theopompos and Phanias of Eresos, cited by Atheneus, VI, p.231,7. See the other texts collected by Böckh to prove this scarcity of gold in Greece in the 6 th and 5 th centuries.(Staatshaushaltung der Athener. Book I, Section 3.

On the contrary, silver was early very common in Greece. In

In the Grecian peninsula and its insular dependencies as in A Asia Minor were found nearly everywhere veins of argentiferous sulphuret of lead, that is still called galena from the name given to it by the Greek miners. Nothing has been found of the gold mines of the Thasians in their island; but in those heaps of scoria that exist on the southwest coast, silver is associated with gray antimonial copper, which forms there the greater part of the metallic residue.[1] In the mines of Mt. Pangeus, s silver is found with gold. Herodotus affirsm that Alexander, the prince that reigned in Macedon at the time of the first Median war, derived daily a talent of silver from a mine worked on his account on the western frontier of his kingdom near lake Prasias.[2] They were also in Cyprus near iron and copper. There were some in several islands of the Archipelago. We know this for Siphnus from Herodotus. In the course of a journey that I made in Greece fifteen years since, I heard of a company formed at Athens and that solicited a concession for working the beds of Melos, where had been found vestiges of ancient works. A little island very near Melos, the ancient Kimolos, had received the name of Argentiere from the French sailors w who frequented those parts, because of the mines known to have been worked there. This metal is mentioned at Seriphos and at Antiparos, as well as at Samos in Ionian lands. It is also found on the adjacent continent in the mountainous district extending from the Phrygian Ida to the Olympus of Bithynia.[3]

Note 1.p.99. L. De Launay. Description géologique des îles de Metelin et Thasos. p. 164-165.(Nouv.arch.d.missions scientifiques. Vol.I.1891.p.127-173). On the mines of the Thasians, see Herodotus. VI.47. The Thasians spent in one day 400 talents of silver to offer a repast to the army of Xerxes. Herodotus. III,57.

Note 2.p.99. Herodotus. V. 17.

Note 3.p.99. Galena is very absndant in Asia Minor at the c contact of the calcareous and the eruptive rocks. This mineral is still mined now at Bulgardağ (40.6 miles north.~~northeast of~~ Mersina), and at Balia-maden (100 miles north-northeast of Smyrna). K.E.Weiss. Kurze Mittheilungen über Lägerstätten in westliche Anatolien.(Zeits.für practische Geologie. 1901.p.244-262).

The Greek cities of the West that struck so many beautiful coins of silver, must not have been embarrassed in procuring

the material for their coinage. Northern Italy and Sicily have no mineral lands; but Sardinia was very near with its rich beds, and by the intermediary of the Massaliotes, and especially by that of the Phoenicians of Carthage, they could derive from the subterranean treasures of Spain the ingots, then beaten by the hammers of the coiners of Tarente and of Syracuse. Africa also furnished its quota of the precious metal. This exclusive use of the silver standard in the entire archaic period explains the meaning that the word argyrion had assumed in the current language. It was applied, as we do the word argent, to t the real fortune, of whatever kinds of money it was composed. Also among the Greeks it was said of a rich man, "that he had much money." [1]

Note 1.p.100. On this acceptance of the word argyrion, proved by several ancient texts and numerous terms of the language, See F. Lenormant. La monnaie dans l'antiquite. Vol. I, p.72,174.

In the course of this long reign of silver, some cities of Asia Minor alone persisted in coining electrum, it is unknown why. Phocea, Mitylene and especially Cyzicus, continued to issue great quantities of staters and of hectes of electrum. Until the end of the 4 th century and even later when the coinage had ceased, the Cyzicenians, as they were called, remained the money most distributed in the entire basin of the Egean sea. The vogue enjoyed by all these coins is explained with difficulty; the standard of alloy varied from one issue to another. They passed everywhere as attested by many texts of authors and the accounts of the treasurers of the temples. it is known however, what depended on the quality of the metal of which t they were made. "Phocean gold is the worst of all gold," says Hezechius.

There is no reason to be surprised that most of the metaliferous deposits, indicated to us by the ancients as having been formerly very productive in the riparian countries of the eastern basin of the Mediterranean, are not now worked. The quantity of the precious metals then in circulation cannot be compared to what it is in the modern world; it wau very much less. Consequently those metals then had much greater value. It was then possible to work profitably beds, that in the present condition of the market would not pay for the trouble that they

would give. Further, then was employed slave labor for this m manual toil, which reduced to almost nothing the cost of working.[1]

Note 1.p.101. Dr. Ing. Freise. Die Gewinnung nutzbarer Mineralien in Kleinasien wärend des Altertums. (Zeits.für pract. G Geologie. 1906. p.277-284).

During the entire archaic age, the ratio of gold to silver appears to have remained in Greece, what was long the rule of exchange in all Asia. In the empire of the Achemenides and in the adjacent countries, gold was valued at 13 times its weight of silver. [2]

Note 2. Herodotus. III. 95.

2. Coins of Asian Greece.

Miletus, early the most powerful and richest of Ionian cities, was that in which the habit of great colonial enterprises must most quickly arouse the spirit of imitation and invention; thus numismatists are in accord in referring to the Miletan mint the first lumps of metal qualified by a stamp to fulfil the p purpose of money. Nothing foresees that the coin could ever b become a work of art.

Those first coins are all of electrum and from the end of t the 7 th century. They are ingots of round or ovoid shape, some being a flat blank and others more or less globular. Some have on one side only parallel strias, on the other being sunken impressions impossible to define (Fig. 57). On others is a star with balls, one part in relief and the other part sunk. This primitive money comprises quite numerous varieties in the cabinets of our museums, all of a character also indeterminate. It is scarcely money. Without a legend, there is not even a type there to represent the city. One is tempted to believe that these pieces were issued by private men rather than by the magistrates. The marks whose impression they bear notify the public that these ingots have been weighed and as the balance attests, that they correspond to one of the divisions of the system of weights of the city and its colonies. The bankers, if there were such that launched these pieces on the market, soon felt the need of placing more definite impressions on them, in which would be more easily recognized the seal of a certain counter. Here is an ingot with one face only grooved by strias (Fig. 58); but on the other are impressions sunk by three punches. In the rectangular punch occupying the middle

of the blank is distinguished the outline of a [illegible] [illegible] projections.

It there prevails great uncertainty on the conditions in wh- [illegible] Miletus seems to commence with a series of pieces of the same metal, that has for type either a lion rampant, sometimes tur- [illegible] forebody of a lion, a muzzle of a lion (Fig. 60), or two [illegible] [illegible] lion personifies the glorious city. This type is found presented in various ways in an entire series of silver coins, that are referred to the second half of the 6 th century.

There have been collected on this coast and on the [illegible] [illegible] tic appearance announce themselves also as the result of the first attempts of Ionian coinage. They are mostly classed among the uncertain, as numismatists say. By the system of weight the balance refers them and they are classified. They are divided between the Milesian and the Phocaean standards. To the first belong the coins with the type of the stag and of the bee, [illegible] appear later. The coins of Phocaea are recognized by the type of the phoca (seal), which is the canting emblem of that city, and by the monogram Φ, that indeed appears to be a phoca. The local pronunciation of the initial letter of the name of [illegible] then oscillated between two separate sounds, which the Greek language later most clearly distinguished by writing, but which always remained very near each other. A certain dialect employed ph where the other used th.[1] To the Phocaean system was attached the first coins of Mitylene in the island of Lesbos, with the type of the calf (Pl. IV, 11) and the head of the lion as well as those of Teos with the type of the griffin ([illegible]). [illegible] square for the reverse of its coins, even when that had passed out of fashion. On the face the tunny at first occupied the [illegible] Cyzicus borrowed from other cities very varied types, to which it never failed to add the emblem that in a manner plays the [illegible]

of the blank is distinguished the outline of a running fox; t the surfaces of the other two punches are covered by irregular projections.

If there prevails great uncertainty on the conditions in which were struck these redimentary coins, the public coinage of Miletus seems to commence with a series of pieces of the same metal, that has for type either a lion rampant, sometimes turned to the left (Fig. 59) and sometimes to the right, a simple forebody of a lion, a muzzle of a lion (Fig. 60), or two and even four lions' muzzles always seen in front. Henceforth the lion personifies the glorious city. This type is found presented in various ways in an entire series of silver coins, that are referred to the second half of the 6 th century.

There have been collected on this coast and on the adjacent islands a number of other coins of electrum, that by their entire appearance announce themselves also as the result of the first attampts of Ionian coinage. They are mostly classed among the uncertain, as numismatists say. By the system of weights the balance refers them and they are classified. They are divided between the Miletan and the Phocean standards. To the first belong the coins with the type of the stag and of the bee, which form the face of the coins of Ephesus, where these types reappear later. The coins of Phocea are recognized by the type of the phoca (seal), which is the canting emblem of that city, and by the monogram ⊖, that indeed appears to be a theta. The local pronunciation of the initial letter of the name of Phoca then hesitated between two aspirate sounds, which the Greek language later must clearly distinguish by writing, but which always remained very near each other. A certain dialect employed ph where the other used th.[1] To the Phocean system was attached the first coins of Mitylene in the island of Lesbos, wi with the type of the calf (Pl. IV, 11) and the head of the boar, as well as those of Teos with the type of the griffin (Fig.61). It is the same with the staters of electrum of Cyzicus. During more than two centuries, Cyzicus always retained the sunken s square for the reverse of its coins, even when that had passed out of fashion. On the face the tunny at first occupied the e entire field; then to diversify the appearance of its coinage, Cyzicus borrowed from other cities very varied types, to which it never failed to add the emblem that in a manner plays there

the part of a legend. Its engravers thus added the tunny to a head of Athena (Fig. 62), to a Triton (Fig. 63), to the head of a bearded man (Fig. 64), to a kneeling Hercules (vignette of Chapter XV), to the forebody of a cock (Fig. 65), to the muzzle of a lion (Fig. 66), etc. Lampsacus, Chios and Samos also had an electrum coinage in which the sizes seem sometimes to be approached to those of the Phocean standard, sometimes the Miletan, and even sometimes that of the system called Eubeic.

1Note 1.p.103. On this subject see Babelon. Traite. Part II. Vol. I, p. 97-98.

Soon appreciated by commerce, the advantages of the monetary reform made by croesus led the coastla Greeks to change their habits. For want of the gold, they struck pure silver. If they agreed to recognize the Cresseids in coins of gold and of silver, which have for type two foreparts of a lion and a bull f facing each other (Pl. VII,1). Each animal extended a front p paw. The lion has open jaws and the bull has a horn in fronta On coins of cities of the coast, we shall find nearly everywhere motives of the same kind, beads, bodies or foreparts of t the bull, lion, ram, wild boar, sphynx and griffin, actual or factitious animals. Heads or busts are frequently connected in pairs on the same piece, sometimes facing as here, sometimes back to back. By the character and arrangement of these effigies is divined the importance of the borrowings that art of Ionia has made from the arts of all adjacent Asia. In very different ways has the influence of the oriental style been exerted on the imagination and hands of the artists of that country. We shall find every trace of this penetrating influence, and it is not possible for it not to make itself felt from the beginning on this forming art of the decoration of the blank coin. The coinage of Croesus, so much sought and so popular from the day of its issue, must have been for much by the model that it offered, in the choice of subjects made by the Ionian engravers, when the coinage of silver commenced about the middle of the 6 th century.

For their first silver coins, Ionian and Eolian cities retained the types used on electrum, Ephesus the bee (Pl. VII,3), Miletus the lion, Samos the lion and also the bull. The bull and the lion are the types of the Creseids. But on the coins

[illegible]
es (540-522), the progress of the art is already apparent.
These coins have on the face a lion's muzzle and the [illegible]
[illegible] (Pl. VI.,4,5). The lion's head is seen in
front and is of much better execution than on the coins of el-
ectrum; there is felt the work of a more skilful and more [illegible]
ian graver. Further, these are perhaps the most ancient [illegible]
on which the engraver knew how to place a type in the [illegible]
square on the reverse. Until then that had comprised only ge-
metrical designs or the little impressions of movable [illegible]
There is less accentuating in the modeling of the sphynx at [illegible]
Chios. The type of Cyzicus is a horseman, perhaps the hero Mi-
ytosen, founder of the city, who mounts a horse at a gallop.
The horse has movement. There is already a happy effort to [illegible]
der the spirit of the race. The winged boar of Clazomenae is [illegible]
[illegible]
[illegible]
[illegible] (Pl. VII,6). The silver coins of Teos
[illegible]
struck with the same type as its coins of electrum. We find at
Lesbos a Gorgon's head putting out its tongue, with a [illegible]
[illegible] (Pl. VII,7), [illegible]
double type, on the face being a boar scratching his groin with
a forefoot, and a head of Athena on the reverse (Pl.IV.4,5). [illegible]
[illegible]
to sizes the legend Methymnaios. Methymna is one of the rare
cities that commenced before 450 to place their names on their
coinage. The numismatics of Lesbos further offers a singular
[illegible]
head, on another obolus is a crowned head of Apollo, and final-
ly on a diobolus are two calves' heads facing each other (Pl.
[illegible]
sense to the Greeks. An arrangement of the same sort [illegible]
[illegible]
seen two heads back to back, one bearded and the other beardless.
Note 1.p.104. On the reasons for attributing these coins to [illegible]
[illegible]
With the exceptional persistence of its coinage of electrum,
Cyzicus only struck very rare and quite small coins of silver.
Of all Greek colonies scattered by Miletus around the Euxine

But on the coins of Samos attributed to the reign of Polycrates (540-522), the progress of the art is already apparent.[1] These coins have on the face a lion's muzzle and the bust of a bull on the reverse (Pl. VII,4,5). The lion's head is seen in front and is of much better execution than on the coins of electrum; there is felt the work of a more skilful and more Grecian graver. Further, these are perhaps the most ancient pieces on which the engraver knew how to place a type in the sunken square on the reverse. Until then that had comprised only geometrical designs or the little impressions of movable punches. There is less accentuating in the modeling of the sphynx at C 3hios. The type of Erythea is a horseman, perhaps the hero Erytheos, founder of the city, who mounts a horse at a gallop. The horse has movement. There is already a happy effort to render the spirit of the race. The winged boar of Clazomene is not exempt from some heaviness, but there is a certain elegance in the griffin with one paw raised, that stands on the staters a and drachmas of Teos (Pl. VII,6). The silver coins of Phocea with the types of the seal and the griffin appear to have been struck with the same dies as its coins of electnum. We find at Lesbos a Gorgon's head putting out its tongue, with a sunken square on the reverse (Pl. VII,20), and another piece with a double type, on the face being a boar scratching his groin with a forepaw, and a head of Athena on the reverse (Pl.IV,4,5). T The last coin mresents a curious peculiarity. One reads on both sides the legend mathymnaios. Methymna is one of the rare cities that commenced before 480 to place their names on their coinage. The numismatics of Lesbos further offers a singular diversity. On the obolus and half obolus is found a negro's head, on another obolus is a crowned head of Apollo, and finally on a didrachma are two calves' heads facing each other (Pl. IV,11). We reproduce the last type for the analogy that it presents to the Creseid. An arrangement of the same sort characterizes the coinage of Lampsacus and of Tenedos, on which are seen two heads back to back, one bearded and the other beardless.

Note 1.p.104. On the reasons for attributing these coins to Polycrates, see Babelon. Traite. Part II. Vol. I,p.289-290.

With the exceptional persistence of its coinage of electrum, Cyzicus only struck very rare and quite small coins of silver. Of all Greek colonies scattered by Miletus around the Euxine

sea, only two, sinope and Panticapeum, struck coins before 480. Sinope has for type the head of an eagle, and Panticapeum the muzzle of a lioness, that it borrowed from Miletus. This lion's muzzle also appears on the face of the coins of most Carian c cities and is associated with reverses, whose type varies frsm one city to another (Pl.IV,24). At Termera, this is a bearded Hercules with the legend Termerikon; at Halicarnassus and Cnidos are wemen's heads, that already aim at grace. One recognizes the Cnidian Aphrodite there (Pl.IV,17); this is the first image that we possess of the celebrated goddess, that later would take form in the masterpiece of Praxiteles. The headdress with the hair raised all around the skull beneath the band that retains it and is knotted above the nape in a thick ball, is nearly that of the illustrious statue. From Calymna is a stater on which is represented on the face the head of a bearded warrior, covered by a helmet with nose-piece and fixed jaws, the top is surmounted by a thick and stiff crest (Figa 68). This is the same helmet worn in the 6 th century by the Carian hoplites. According to Plutarch, the Persians called Carians cooks, because of the crests of their helmets.[1] The style of this effigy is very archaic. The eye is a ball, the nose terminates in a ball, and the beard appears hard. The coin must d date from the time under Psammeticus, when the Greek mercenaries landed at the mouths of the Nile and made the effect of men of bronze on the astonished Egyptians.[1] The face here is almost entirely concealed by a metal covering. The type of the reverse has an entirely different appearance. It is a lyre with 7 strings, whose body is made of the shell of a tortoise. This lyre is inclosed in a depression whose contours outline those of the instrument (Fig. 69). In this arrangement which modifies the ordinary form of the sunken square and in the entire design of the lyre, there is a freedom that contrasts with the conventional character of the modeling of the head. The engraver felt himself more at ease to reproduce a material object than to offer a faithful image of the human countenance. The type of the Reverse has been explained by a play on words. To designate the tortoise, the Greek language had besides the usual forms of Chelys and chelone a form Chelymna, which is found in the poets. Chelymna differs from Calymna only by the initial aspirate. This tortoise shell to which were attached

the strings of the lyre, will enter the list of what we de-
termed dancing arms.[2]

Note 1.p.105. Plutarch. Artaxerxes. II.

[illegible]

Note 2.p.106. Babelon. Traité. Part II.Vol.I.p.488-489.

[illegible]

of Caria as well as the winged boar of Ialysus lend itself

to the effect; but on certain staters of Lindos are lion's

heads of very beautiful character (Pl.IV,24).On the coins of

[illegible]

but the animal most frequently represented is the wild boar.

[illegible]

rever has sometimes made a very happy effort to render the g-

se of the stag, pretending to oppose the hunters (Pl.IV,[illegible]). In

the common staters of many Lycian pieces is a singular motive

called the triskele (three legs); it is made of three curved

[illegible]

Note 3.p.106. [illegible]. Le culte du soleil aux temps pré-
historiques (Rev. arch. 1889. Vols. I, IV).

Phaselis, located on the border of Lycia and Pamphylia, giv-
es the form of a boat's head to the prow of a ship, which is
placed on most of its coins (Pl.VII,5,10); but what is more [illegible]

[illegible]

in front. By the attention given to these faces and the width of
their [illegible],
the [illegible] of Egypt and the [illegible] of the Assyrian cylinders.[1]

[illegible]

[illegible] in Cyprus.[2] The Phoenician cities of Lapethos and
of Salamis have for type a nude warrior, helmeted, with the
shield on his left arm on the face. In the lowered right hand
he holds a short sword (Fig. 71). On the reverse is the [illegible]
[illegible] composed of three heads [illegible]. Side, an Aeolian colony,
has on the face the [illegible] type of a pomegranate (side), [illegible]

[illegible]

work (Fig. 72). Kelenderis in Cilicia has for type [illegible]
Mallos has a figure of a winged woman, a Nike, whose [illegible]
is that of the Nike of Archermos at Delos, which [illegible]

usually gives to persons running.[3] As a reverse, all these coins of Mallos have a conical idol stone; this is accompanied by two symbols, that where most clearly struck appear to represent grapes (Pl.IV,21).[4] History tells us nothing concerning the local cults of Mallos; but that Cilician city is quite near Syria, and we know what a role the conical idol stones played in the Syrian cults, were this only from the stone of Emesus.

Note 1.p.107. Histoire de l'Art. Vol. I. Figs. 535, 536, 549; II. Figs. 225, 332, 337.

Note 2.p.107. The same. Vol. III. Fig. 388.

Note 3.p.107. The same. Vol. VIII. p.301-365; Figs.122-125.

Note 4.p.107. It is believed that doves are seen on certain coins (Babelon. Vol.I of Part II,p.560-561). In their images presented here, it seems to me difficult to recognize the birds.

We have already had occasion to define the very peculiar characters presented by the monuments of sculpture in the island of Cyprus, which very early was occupied and claimed by the Phoenicians and the Greeks.[5] Thus was created a hybrid art, t that if it lacks beauty yet interests the historian by what he finds there and distinguishes of the different influences, whose competition ended in a sort of compromise. The Greek cities of the island commenced to strike coins about the middle of t the 6 th century. The example was given by Salamine, where reigned a dynasty that claimed to be of the race of the Aecides. On the coinage of Salamine we read the names of Evelthon, Gorgos and Nicodamos, princes, the two first being known to Herodotus.[1] These names are inscribed by the letters of that syllabic alphabet, whose use was maintained at Cyprus until the 4 th century.[2]

Note 5.p.107.Histoire de l'Art. Vol.III. p. 620-628.

Note 1.p.108. Herodotus. IV, 162; V,104; VIII, 11.

Note 2.p.108. On the Cypriote alphabet, see Histoire de l' Art. Vol. III. p.473-496; Figs. 347-348.

Like the works of sculptors with too facile chisels, who cut in the limestone of the island so many statues and reliefs, t the effigies of the coinage of Cyprus have a certain heaviness. One can judge of them by the type of couchant ram repeated on the faces of all coinage of Salamine (Pl.VII,11). On the reverse the ring cross, a symbol of Egyptian origin, which was elsewhere appropriated as an ornamenta, motiveby Phoenician dec-

decorators (Pl.VII,12). This cross here seems to prove the relations that the island maintained with Egypt. About 560, Amasis had compelled the Cypriote dynasties to recognize his supremacy and to pay him tribute.[3] It is possible that the presence of this symbol on the coinage of Salamine might be a mark of vassalage and official homage rendered to the Pharoah of Sais.

Note 3.p.108. Herodotus. IV. 162.

This cross is found on the reverse of coins attributed to o other cities of the island, Kition, Idalion, Paphos and Soli. The types vary on the faces of these pieces; there are the lion crouching or walking, the lion's head, the winged sphynx, the bull with human head, the mask of the Gorgon, etc. Excepting some lion's muzzles that do not lack accent, all these are of rather soft execution. Yet two pieces offer some interest by the analogy which they present to the known monuments of Cypriote statuary. One of them is a tetrobolus. There is seen on the face Hercules walking at a great pace through a forest indicated by two pines with branches and leaves, the left arm e extends forward and must hold the bow; but the blank must have been badly placed under the die; neither that hand nor the raised right hand brandishing the club have come out in striking. On the reverse is a bull beneath a laurel branch (Fig. 73). It is believed that here is reason to recognize a theme, that appears a favorite with Cypriote sculptors, Hercules carrying off the oxen of Geryon. The engraver had here cut in two the scene represented on a relief of very archaic style found at Athienan, the probable site of the ancient Golgos.[1] The bull on the reverse alone represents the entire herd taken by Hercules. A Again see on a stater a nude personage, whose attitude is the same as that of Hercules on the tetrobulus; but he announces himself here as Hermes by the chlamys floating on his shoulders and the caduceus is drawn on the field without thinking to place it in his hand (Pl.VII,13,14). On the reverse is an image of Egyptian origin, like the ring cross, the horned head of Z Zeus Ammon. By the character of the profile as well as by the arrangement of the beard cut to a point, this recalls the heads of many Cypriote statues.[2]

Note 1.p.109. Histoire de l'Art. Vol.III.p.573-577; Fig.387.
Note 2.p.109. The same. Vol.III. Figs. 350, 354, 504.

In connection with the coins that we have mentioned are arranged various pieces under the name of uncertainties of Asia Minor, that permit reference to that country by the places where found, the style of engraving, the form of the sunken squares, and especially the choice of types. None of them merits any particular attention.

Of the coinage of the Greek cities of the Asian coast and of the adjacent islands, we have given a sufficient number of specimens for one to judge of the part derived from the new invention by artists called to engrave an image on the blank coins. Whether the Lydians or Greeks have the right to claim the honor of that invention matters little; what is not doubtful is that the first coins struck by the Greeks are the coinage of the I Ionian cities. In this as in many other matters, then to the Ionians belongs the merit of having been precurosrs and initiators; but the glory of being the first does not always fall to those that started earliest. They are often passed by others beginning later, that have had the advantage of finding t the route traced. Indeed the Ionians taught the Greeks of the islands of the Egean sea like those of the European continent and through them all the coastal peoples of the Mediterranean, the benefit found in substituting for the slow weighings of t the crude metal the quickness of money passing from hand to h hand, guaranteed against all suspicion and formed by the effigy and legend stamped on it by the State that issued it; but the Persian conquest came about the end of the 6 th century to arrest the flight of their fortunate genius, and not among them from the first years of the following century did the engravers of coins, trained by and rivals of the contemporary sculptors, succeed in placing in the field of a small circle of silver an image, that in spite of its very limited dimensions, faithfully reflects the elegance and nobleness of the works of sculpture. This generous ambition of the engraver, this search for beauty of the type, is further what we sall see manifested before even the end of the archaic period; this will occur in p places in European Greece and the Cyclades, particularly in Magna Grecia and in Sicily. On these coins of the cities of Asian Greece, figures of deities represented on foot are very rare; we have found there only a small number of female or male heads. What dominates by far are heads of animals, actual or

factitious. These images are more easily executed than those in which the engraver has attempted to reproduce the movement of the human body or the traits of its features. The engraver further has there another reason for adhering to this rather ordinary repertory; this is because for this kind of themes, he found models in oriental art. Thus is explained the great part in the intire coinage of Asian Greece at first by the lion, that antagonist of the great hunts that pleased the Pharoahs and especially the kings of Babylon and of Nineveh, and t then after him was an entire series of composite animals, the winged lion, horse and boar, the bull with human face, the sphynx and the griffin. Those are children of an imagination and taste, that had not succeeded in seizing and rendering the superior beauty of the human figure, of a body and expressive f face, play and spend themselves in combining forms that nature has separated. By the docility with which they suffer the influence of arts grown old, that do not have the appearance of richness, the engravers of Ionian and Cypriote coins show that they have not yet conquered their entire independence.

3. Coins of central Hellenic Countries.

Main and Northern Greece, Egean Islands and Cyrenica.

If various indications lead us to believe that on the coast of Asia, the bankers of Miletus initiated the Ionians in the use of money, the case is no longer the same when it is necessary to know how and when the Greeks of the westery shores of the Egean sea learned to use that novel means of exchange. The first mint opened on those coasts was that in Egina. About the end of the 7 th century, a certain prince Phidon at Egina struck coins of a size corresponding to a system of weights and measures adopted in the entire Peloponnessus.[1] Phidon reigned over both Argolis and the adjacent islands. He even appears to have claimed the exercise of a sort of supremacy over all the States of the peninsula.

Note 1.p.111. Histoire de l'Art. Vol. IX,p.49-50.

The Temenides of Argos did not retain this predominant position long. Corinth and Sicyon prospered under the authority of the Bacchiades, Cypselides and Orthagorides. Sparta increased and caused Argos to suffer repeated defeats, by means of which Egina conquered complete independence. During a century and a half until the time when in 447 it yielded to the efforts of

Athens, thus was one of the most industrious, commercial [illegible]
[illegible]
and even with Egypt. It took part in the founding of Naucrat-
is, and had built there for its people a temple of Zeus.[2] Its
merchants supplied the entire Peloponnesus with the [illegible]
the Orient. To protect its merchant navy, it had a war navy.
[illegible]
[illegible]
these conditions, the mint formerly established by Phidon could
[illegible]
number of coins of Ægina found in the islands of the Archipela-
go and in the Peloponnesus.[3] Further, these coins all [illegible]
[illegible]
on the reverse a sunken square usually divided into 5 irregul-
[illegible]

Note 2.p.111. Herodotus. II. 178.

Note 3.p.111. In the course of my excursions in the Morea, I had long been struck by the great number of Ægina turtles brought to me by the peasants.

One divides the first attempts of the mint of Phidon in the oblong or globular lumps of silver, whose entire appearance betrays the awkwardness of a workman still very inexperienced. The image of the turtle is vaguely sketched and does not [illegible] the middle of the coin (Pl.VII.1,2), and sometimes is not entirely struck. Certain of these pieces also very nearly re- all the bars and ingots of iron or of copper, that under the name of "little bits" long served to pay the price of a sale. When money appeared in its most rudimentary form, the ancient practice fell into disuse, and Phidon desired this to be acknowledged of the success of the innovation produced by him. According to Aristotle, he caused some of these bits to be placed [illegible]
[illegible]
venerable relics of the past.

Note 1.p.112. Pollux. IX, 77.

Until 460, little change is noted in the series of the coins of Ægina, only [illegible]
the shell of the turtle, at first smooth, presented along its middle a series of points forming a sort of dorsal spine. (
[illegible]

Athens, this was one of the most industrious, commercial and richest cities of Hellas. It trafficked with the Phoenicians and even with Egypt. It took part in the founding of Naucratis, and had built there for its people a temple of Zeus.[2] Its merchants supplied the entire Peloponnessus with the wares of the Orient. To protect its merchant navy, it had a war navy. Its triremes alarmed Athens in the Saronic gulf, they distinguished themselves in the battles of the second Median war. In these conditions, the mint formerly established by Phidon could not cease. What attests its continued activity is the great n number of coins of Egina found in the islands of the Archipelago ind in the Peloponnessus.[3] Further, these coins all reproduce the same type; they have on the face the sea turtle and on the reverse a sunken square usually divided into 5 irregular compartments, triangles or rectangles.

Note 2.p.111. Herodotus. II. 178.

Note 3.p.111. In the course of my excursions in the Morea, I had long been struck by the great number of Egina turtles brought to me by the peasants.

One divines the first attempts of the mint of Phidon in the oblong or globular lumps of silver, whose entire appearance b betrays the awkwardness of a workman still very inexperienced. The image of the turtle is vaguely sketched and does not occupy the middle of the coin (Pl.VII,1,2),and sometimes is not entirely struck. Certain of these pieces also very nearly recall the bars and ingots of iron or of copper, that under the name of "little bits" long served to pay the price of a sale. When money appeared in its most rudimentary form, the ancient practice fell into disuse, and Phidon desired this to be noted, proud of the success of the innovation produced by him. According to Aristotle, he caused some of these bits to be placed on the walls of the temple of Hera in Argos;[1] they were shown as venerable relics of the past.

Note 1.p.112. Pollux. IX, 77.

Until 480, little change is noted in the series of the coins of Egina. Only at length the blank became less irregular, and the shell of the turtle, at first smooth, presented along its middle a series of points forming a sort of dorsal spines. ((Pl.VIII,3,4). Very frequently with punched countermarks like

the old coins of Asian Greece, all these pieces with turtles are without legends; but one cannot doubt that there is reason to attribute them to Egina. If it is desired to reject them, it would be necessary to admit, that after Phidon Egina struck no money, an inadmissible hypothesis. The autonymous Egina of the 6 th and 5 th centuries was too enterprising and too rich not to have its mint, as then in all Hellas the cities had, which could not rival the importance of Egina. It is understood that remained obstinately faithful to the type originated by Phidon. The particular coinage of the different cities of Peloponnessus, it appears had not supplanted in public favor the coins marked by the type of the turtle; they were scarcely current outside the frontiers of the State that issued them. On the contrary, the turtles of Egina were familiar to all eyes and circulated everywhere,from the gulfs of Messenia and of Laconia to the entrance of the isthmus. These coins were like a common coinage, the national money of the entire peninsula. A lexicographer says:- "The turtle is a Peloponnessian coin." [1]

Note 1.p.113. Hesychius. (Greek). Likewise Pollux.IX,74.

Quite as near to central Greece as Egina was to the Peloponnessus, Eubea early had the two flourishing cities of Chalcis and Eretria. Both were skilful in working the copper furnished by the mines of the island itself, and exporeted to the principal markets of Greece arms and utensils of all kinds. The arts of plastic clay were also much cultivated. In the ardor of their expansion, they had founded colonies everywhere in the western coasts of the Adriatic, in the so-called Ionian islands and in Sicily; colonists from Eubea had peopled and conquered for Hellenic civilization that peninsula of Thrace, that took the name of Chalcidice. For the needs of their business, Chalcis and Eretria struck,coins of careful fabrication. All those of Chalcis had the flying eagle on the face (Pl.IV,3), on the reverse the wheel with four spokes; but those of Eretria presented more varied types, the mask of a Gorgon thrusting out t the tongue (Pl.VII,20; VIII,5,6) and a cow's head, the same mask of a lion's muzzle, a cow turning her head to lick one of her hind feet, and an octopus with 8 volute tentacles (Pl.V,15, 17). The last piece must be little earlier than the destruction of Eretria by the Persians. Its execution is already very free. The engraver has rendered well a very complex movement. He has

put suppleness in the bent neck of the cow and in that of the raised member. The head and flank of the animal are broadly modeled. To be noted also is a picturesque detail, the bird perched on the back of the animal. Who has not seen in a meadow a crow or a starling place himself thus on the back of one of the beasts of a herd to gather insects? If the artist has made proof of invention and skill, what is still more curious on that coin is its reverse. One is struck to find there a recall to a motive dearest to the Mycenaean decorator.[2] The Greeks of Eubea were of Ionian race and it is in the art of Ionia that is found most of the survivals of an art, whose tradition had been almost entirely broken in European Greece by the advent of the geometric style.

Note 2.p.113. Histoire de l'Art. Vol. VI, p.929-926; Pl.XXI, Figs. 487, 489, 491, 492.

Carystos, third in rank of importance of the cities of Eubea, also had quite beautiful coins. On the face is a cow turning her head to lick the calf that she suckles; on the reverse is a cock (Fig. 74). On other pieces of the same city is a bull scratching his flank, or the forebody of a bull (Pl.VII,18). One will note the preference that the coiners of Eubea appear to have for images borrowed from the bovine species. The ancients connected the name of Eubea (Eu-boia, the country of beautiful oxen) with the myth of the nymph Io, who was loved by Z Zeus and gave birth to Epaphos in a grotto of the island, and was changed into a cow by jealous Hera.[1] These heads of oxen and cows were an allusion to a very popular myth, and at the same time a mark of origin, canting arms.

Note 1.p.114. Strabo. X. 1-3.

The coinage of Athens is less interesting by the diversity of its types and by their beauty, than by the part that it played, especially after the 5 th century, in the monetary circulation in Greece and the adjacent countries, even those very distant. For that reaso is it proper not to pass in silence i its modest beginnings. Athens does not seem to have been one of the cities of European Greece in great haste to follow the example given by Phidon. This is suggested by the laws promulgated by Draco about the year 621 B.C. Nothing there is said of their arrangements implying the use of a metallic coinage. The assessment of fines was reckoned there in heads of cattle.

[illegible]

the time of Draco and that of Solon, that the mint of Athens was opened. These first coins of Athens were all without leg- [illegible] pieces of very primitive appearance, that have on the face a [illegible] the reverse, such as the owl, horse, amphora, knuckle-bone, triskele and wheel. Solon seems to have changed nothing in the [illegible] -ously existing between the drachma and the money of account called the mina.[1]

[illegible] [illegible])

Note 1.p.115. See the explanations of the reform given by [illegible] grecque. French translation. Vol. I, p.408).

In the pieces mentioned above most numismatists recognize a [illegible] has been confessed. Certainty only commences with the rise [illegible] -ries of coins that have on the face the type of the helmeted [illegible] legend A TH E, abbreviation of Athenaion. Then did Athens accept [illegible] emblems, for which such a prodigious fortune was reserved, since they must perpetuate themselves with scarcely a change during several centuries? [2]

[illegible] nes, p.15) and that of Babelon (Traité. Part II, vol.I, pp 629-634). He made important finds of these coins at Athens itself and in Attica. Others attribute these coins to Chalcis or Eretria (see the notes of Babelon).

[illegible]

No text informs us in this respect; but all that is known of the history of Athens in the 6th century suggests a hypothesis that offers a high degree of probability. We have showed el- [illegible] life of Athens, and how by the initiative that he had taken the the city was transformed, was ornamented by noble edifice-

On the other hand, ancient authors are in accord in placing in the number of reforms made by Solon after 593 a monetary reform.[2] It would then be in the last years of the 7 th century between the time of Draco and that of Solon, that the mint of Athens was opened. Those first coins of Athens were all without letters, and it is believed there is reason to recognize them in pieces of very primitive appearance, that have on the face a sunken square cut by 4 diagonal bars, with different types on the reverse, such as the owl, horse, amphora, knuckle-bone, triskele and wheel. Solon seems to have changed nothing in the types then current. He was satisfied to modify the ratio previously existing between the drachma and the money of account called the mina.[1]

Note 2.p.114. Plutarch. Solon. XV,-; Artistotle. Athenaion politeia).

Note 1.p.115. See the explanations of the reform given by Babelon (Traite. P.rt II. Vol. I,p.698) and Curtius (Histoire grecque. French translation. Vol. I, p.406).

In the pieces mentioned above most numismatists recognize A Attic coins, before Solon and in his time.[2] This attribution has been contested. Certainty only commences with the rich series of coins that have on the face the type of the helmeted head, on the reverse being the owl in a sunken square with the legend A Th E, abbreviation of Athenaion. When did Athens adopt these types? Who is the personage to whom are due these novel emblems, for which such a prodigious fortune was reserved, since they must perpetuate themselves with scarcely a change during several centuries? [3]

Note 2.p.115. This is the opinion of Beule (Monnaies d'Athenes, p.15) and that of Babelon (Traite. Part II, vol.I,pa 698-723). He made important finds of these coins at Athens itself and in Attica. Others attribute these coint to Chalcis or Eretria (see the notes of Babelon).

Note 3.p.115. Babalon. Traite. Part II. Vol.I,p.723.

No text informs us in this respect; but all that is known of the history of Athens in the 6 th century suggests a hypothesis, that offers a high degree of probability. We have stated elsewhere what a burst the genius of Pisistrates impressed on the life of Athens, and how by the initiative that he had taken t the city was transformed, was ornamented by noble edifices dec-

decorated by sculptures, where marble tended to take the place of stone.[4] There is reason to suppose that the attention of a chief of a State like Pisistratus must have been drawn also to the monetary types of the city, that he seemed to take up the task of preparing for the high destinies, that the near future held for it. The conjecture that presents inself to the mind elsewhere finds an indirect confirmation in what the historians tell us of the insistence with which in the course of his uneven career, Pisistratus always held to present himself as the protege of Athena. Herodotus relates how after his first exile, when Pisistratus undertook to seize the power again, by the aid of a beautiful peasant woman who represented the goddess, he succeeded in returning to the city behind the chariot in which the credulous multitude believed it say Athena enthroned in Person. [5] Exiled a second time, when he had decided to appeal to arms to force the gates shut against him, he assembled his soldiers and partisans near the old sanctuary of Athena of Pallene, he marched on Athens from thence.[1] This devotee of Athena must have had the idea of giving as a mark to the c coinage of the city the head of the goddess, under whose patronage he had placed himself, and with whom he inhabited the strong citadel. His palace and the two temples of Athena were contiguous there.

Note 4.p.115. Histoire de l'Art. Vol.VII,p.315,31.; VIII,p. 29, 33-37, 55, .48-551.

Note 5.p.115. Herodotus. I. 60.

Note 1.p.11.. The same. I. 62.

By their very rude fabrication is distinguished in a lot of archaic coins of Athens, those pieces that represent the first coins that Pisistratus caused to be engraved about the year 560 by the type of the helmeted Athena and the owl. What these pieces recall are certain fragments of sculptures on limestone d discovered in the recent excavations on the Acropolis, and that men agree in recognizing as a remnant of the works executed by Athenian image-makers in the first half of the 6 th century, before there was felt at Athens the influence of Ionian models.[2] Traits which characterize this old indigenous statuary are found again on those coins that open the series. See the effigy of Athens whose surface there occupies the entire surface of

the piece (Pl.V,9; VIII,9)."Her eyes appear pushed out of their orbits and are as round and globular as those of the owl on the reverse. This is indeed Athena glauchopis, the goddess with enormous eyes flush with the head, brilliant as those of the nocturnal bird. Also see those great half opened and thick lips, the long pointed chin, that itself reaches the middle of the figure, the pointed nose projecting forward, the too small helmet, the cartilaginous ear with a ring or heavy ball as a pendant. The hair is curled with an iron and arranged in rows ab- the brow, betraying a naive search for elegance."[4]

Note 2.p.116. Histoire de l'Art. Vol.VIII, Figs. 84,86,275.

Note 3.p.116. The same. p. 545.

Note 4.p.116. Babelon. Traite.Part II. Vol.I,p. 730.

Yet under Pisistratus the artists of Chios and Samos being called to Athens initiated the sculptors of that city in marble work, and there is seen to arise the style termed the second Attic archaism.[5] The fabrication of the coinage improves by degrees. Whether they date from the last years of Pisistratus or from the reign of Hipparchus and Hippias, many coins s show a visible advance (Pl.VIII,7,8). This is always the same type; but the helmet is better placed on the head, and its body is a free relief. The arrangement of the hair is simpler t than in the first sketches. If the eye has the defect in front view on a face in profile, its orbit here is not so round; it opens in almond form. The nose prolonging the line of the brow is too pointed; but the nostril is well drawn. The ear is also placed much better. The lips are still prominent and are closed. The chin is broad and firm. The cheek is modeled with care and sketches that smile, which in the thought of the artists of t that epoch must give a benevolent expression to the images of the deity. This head of Athena approaches that given to the goddess by the author of a native relief found on the Acropolis.[1] There is certainly some analogy between the two monuments. The execution of the marble is more archaic. The nose is more tapering and the strongly marked recession of the lower part of the face gives to the marble profile a more awkward and more primitive appearance.[2] Perhaps it results from this comparison that it is proper to place the coins in question about the last quarter of the century, at about the time of the reign of the two Pisistratides.

Note 5.p.116. Histoire de l'Art. Vol.VIII,p.546-574.

Note 1.p.117. Babelon.Traite.Part II.Vol.I,p.745.

Note 2.p.117.Histoire de l'Art.Vol.VIII,Fig. 314.

When one tries to classify these coins according to their more or less advanced style, he finds some that are distinguished from the preceding not alone by their execution, but also by certain peculiarities in adjustment, not previously presented by the engraving of coins."In place of a helmet with an entirely plain and smooth body, there appears a helmet with body ornamented by three large olive leaves extending from the ear to above the brow. Behind the ear, the helmet is decorated by a branch in a spiral curve, that leaves the arm to end in an elegant palmatium. Concerning the effigy itself of Athena, the hair of the goddess is henceforth arranged in two bands on the brow and the temples. These bands replace the curls made with the iron or the wavy drops of the front parts. Finally on the nape, little tresses emerge beneath the helmet, arranged in rows of beads and raised in a ball. On the reverse is regularly an olive shoot in the sunken square. It earlier contained elongated leaves in variable number around a central berry. It is henceforth uniformly composed of the olive berry with two leaves well displayed. Finally, behind the owl appears the crescent for the first time.

At what epoch did these changes occur? Being given the traditional character of the types of Athenian coins, one can believe from the preceding that there was required a very extraordinary event to decide men to modify thus the image of Athena, and that this modification should be respected through the ages.[1]

Note 1.p.118. Babelon.Traite.Part II.Vol. I,p.63.

This event is believed to be the battle of Marathon, that by the surprise of the conquereors themselves made a profound impfession on the Athenian mind. What confirms this conjecture is the fact that the Athenians struck then a decadrachma with the type of Athena crowned by an olive branch, which is unique in the archaic coinage of Athens (Pl.V,7,13). The head of Athena is there the same as on the didrachmas and drachmas; but the details are more careful. Thus the ear is still too large and has for a pendant, not an enormous ball as on the tetradrachma, but a delicate jewel elongated like a tear with two pearls at

the base. On the reverse the type of the owl differs from that of the tetradrachma. It is an owl in front view and not in profile. With extended wings, it seems to sear in space. One can imagine it flying thus over the Athenian army to protect it during the combat. The olive branch is like that of coins of less size; but the crescent is not traced there.

The coins that announce themselves by their style as contemporaneous of that beautiful piece were issued in very great quantity; they are very common in collections. On the contrary, there are preserved altogether only half a dozen examples of the decadrachma. Only a very few proofs of that coin seem to have been struck. We have no reason to believe that they were not placed in circulation, like those representing the other multiples of the drachma; yet it cannot be denied that this coin is regarded as a medal. What gave it something of that character was the rarity of the piece, its exceptional size and the effort made by the engraver to attain a finer execution, than in the coins that left the same mint in great quantity.

Funther, there is nothing here in the style opposed to the proposed hypothesis. The analogy is very apparent between the head of Athena of the decadrachma and that of several female statues, the kores of the Acropolis, as they are calle, which were discovered on the excavations of 1886. On these statues and on the coin is the same profile line, the same almond eye, the same bands on the brow, the same slightly heavy chin, the same jewels in the ears, the same seeking for an expression t that desires to be a smile.[1] Where the resemblance is perhaps yet more striking is when one compares the face of the effigy of the coin with the two bronze statuettes of the museum of t the Acropolis, that represent Athena Promachos.[2] Now all the kores were found in the layer of rubbish, that came from the devastation suffered by the Acropolis in 480, and men agree in recognizing there works that date in the last years of the 6 th or the first years of the 5 th centuries. As for the statuettes of Athena fighting found in number in the same deposit,[3] not only by their fabrication is one tempted to assign them a date very near that of the conflagration kindled by the Persians. At what time could this type have been more in favor than on the morrow of the day, when the tutelary goddess was armed with spear and shield, and on the plain of Marathon had aided

the Athenians in repulsing the invasion?

Note 1.p.119. Histoire de l'Art. Vol.VII,Figs. 289-304.

Note 2.p.119. The same. Figs. 308, 309.

Note 3.p.119. In the museum of the Acropolis are counted 13 examples of those Athenas. (De Ridder. Catalogue des bronzes etc. p.297-314.

The mint of Athens continued to reproduce with routine fidelity till the full 4 th century, the type introduced by Pisistratus. At most the engraver decided, we do not know when, to rectify the drawing of the eye, that until then in the archaic mode, had been drawn in front view in a face presented in profile. Nearly that which recalls still the effigy of Athena in the time of Pericles, is the head of the antique image of the oldest temple of Athena, which is not that of Athena Parthenos that Phidias erected in the temple built by Ictinos. The coinage of Athens then enjoyed among the half barbarous peoples adjoining the civilized world, a vogue proved by the numerous counterfeits made of it in the north and south of Greece; it was necessary to disturb the habits of that vast connection.

Another coinage whose circulation was scarcely less extended, and for which by the same reasons the city was no less careful to retain its customary appearance, was that of Corinth. From the 8 th century under the dynasty of the Bacchiades, Corinthian vessels scattered colonies on the eastern shore of the Adriatic, one of which, Corcyra, soon became very flourishing and very wealthy. In 735, Corinth also founded in Sicily that Syracuse, which such brilliant destinies awaited. About the same time a Corinthian constructor, Aminocles, endowed the Grecian navy with a novel type of structure, the trireme, the war vessel of the Greeks. The prosperity of Corinth increased again under the founder of the new dynasty, Cypselos. To all the markets of the Mediterranean the potters of Corinth exported their painted vases, and its bronze-workers sent their mirrors, furniture and utensils of all kinds. It is believed to have been under the long reign of Cypselos (657-629), that Corinth began to strike coins, and this became ever more active under Periander, son and successor of Cypselos. He carried to the highest point the power of Corinth, and opened new outlets for its industries.

From the beginning, Corinth placed on the face of her coinage

Pegasus, the winged horse that one of her legendary heros, Bellerophon, grandson of Sisyphus, mounted to fight and conquer the Chimera. On the reverse was a sunken square like that of Egina (Pl.IV,IX,18; VIII,10). Beneath the horse is a kappa,the initial of the name of Corinth as formerly written in an archaic alphabet, some letters of which soon fell into disuse. On the most ancient of these coins, Pegasus has a very proud aspect. The engraver has well rendered the movement of the courser still untamed, that rises on his hind feet and rears. Later the head of Athena Chalmites is inserted in the sunken square; it is sometimes replaced there by a mask of the Gorgon; but this type of the reverse remained very mediocre in execution, at least during the archaic age. One would say that the artist did not attach the same importance to it as to the face. The true type of the Corinthian coinage was the Pegasus, by which it was recognized at once by all customers of the city on the two seas.[1] Also to profit by the eager reception that these coins found on so many distant markets, the colonies of Corinth adopted the method of striking coins only distinguished from those of the metropolis by the absence of the monogram, whose ownership was reserved by the latter. One after another, this was done Ambracia, Anacterion, Leucas, Apollonia, Epidamnos, etc. There were also struck staters with Corinthian types in Italy and in Sicily.[1] Corcyra alone, to affirm the complete independence that was early her ambition, and that she conquered forever after the death of Periander, had types that belonged to herself from the day that she opened her mint about 580.

Note 1.p.120. Bimaris, as the Latin poets Virgil and Horace say in speakink of Corinth.

Note 1.p.121. Barclay Head. Historia nummorum. p.341.

These types present no analogy to those of Corinth. Corcyra posed as a rival and even an enemy of her metropolis. She desired to appear as owing nothing to her. In Eubea we already find this motive, perhaps borrowed from some Phoenician patera or some Mycenaean intaglio, that she had adopted at first, of a cow suckling her calf (Fig. 75).[2] On the reverse was a sunken square decorated by one or two flowers (Fig. 76 and Pl.VIII, 22). Alsewhere with the same flower on the reverse, on the face is only the forepart of a cow lying on the ground; one of her legs projects forward and the other is folded under her body.

(Pl.VIII,21). What justifies attributing to Corcyra these pieces without letters is, that on the coins of the 5 th century on which the same types are repeated, is read the letter K and sometimes the three letters K O R. In the flower of the sunken square it has been desired to see a sketch representation of those gardens of Alkinoos described by the Odyssey. The ancients identified Corcyra, now Corfu, with the Homeric island of the Pheacians. The famous labyrinth of Crete is thus represented on the coinage of Cnossos. In execution the cow on the coins of Corcyra does not equal that of the coinage of Carystos (Fig. 74); it is less correct and firm in modeling.

Note 2.p.121. Histoire de l'Art. Vol.III,p.789-790; Figs. 552, 553; VI, p.853; Pl. XVI,15).

To return to the coinage of Peloponnessus, the entire north of the peninsula, Phlionte, Argos, Achaia and even Sicyon, in spite of the prosperity enjoyed under its Orthagoride princes, and despite the fame of its sculptors, do not present pieces that have a true art value. However, to the engraver of the coins of Argos may be attributed the merit of having well seized the outline of the wolf (Pl.VIII,11,12). Arcady offers more varied types with Demeter veiled (Pl.VIII,13) or without veil (Pl.IV,17;Pl.V,10), and Hera with Zeus Lykeos on the face, (Pl.VIII,1) and the head of Despoina on the reverse. There are also several federal coins with the legend A R K A (Pl.VIII, 15), with the bear of Mantinea (Pl.VIII,14). Elis in the west of the peninsula will strike about the end of the 5 th century beautiful coins, on which is believed to be found a copy of the chryselephantine head of Phidias' Colossus; but near it the year 500, it already issued coins of careful work, interesting by their types. These allude to the Olympic games, of whose presidency Elis was assured by the destruction of Pisa, and to the worship that all Greece came to render to Zeus Olympos. On the face is an eagle flying and holding in its beak and claws a serpent that coils around it and seeks to slay it, (Pl.VIII,17), on the reverse being a nude Zeus, bearded, resting on the right leg, the left thrown forward, in the raised right hand he brandishes the thunderbolts. He advances the left arm with open hand, on the wrist being placed an eagle with raised wings, turning its head to look at the god. The legend is Olyngicon (Pl.VIII,18). In that image is the reprod-

reproduction of a very archaic statue of Zeus, whose type will be found later in Zeus Ithomates of Messene and in the Zeus of Aigion, works of the Argive sculptor Ageladas.[1] This type of the eagle in full flight is coupled on other coins of Elis,, either with a winged thunderbolt, or with a Nike with wings spread and walking with rapid steps, raising with the right hand the folds of her vertment and holding a crown in her right.(Pl.IV,1,3). This Victory is one of the best images found in the series of archaic coins of Greece. The running movement is rendered here in a manner less conventional and less forced than in the Delian Nike of Archermos, in a certain bronze statuette and many paintings of vases.[2]

Note 1.p.122. On Ageladas and on this type, see Histoire de l'Art. Vol. VIII, p.467-469; Figs. 237-238.

Note 2.p.122. The same. Vol. VIII,Figs.122-123.

Sparta only commenced to strike coins very late, about the end of the 4 th century under the king Areos.

In regard to Corinthian coinage, we have spoken of that of the Corinthian colonies of the coast of Epirus and of that of Corcyra. There is from Cephallonia a very pretty piece with the type of the Nymph Procis and a ram.

Of all cities of central Greece, that which has enjoyed in history the most brilliant role is Thebes, which at times was the fortunate rival of Athens and of Sparta; but Thebes, and after its example the other Beotian cities, adopted from the very first a type which they then reproduced to satiety during several centuries. This type is that of the oval shield with two notches (Pl.VIII,19). Beotian coinage with its shields alweys the same is as common and monotonous as that of Egina with its turtles.

These customs that thus became stablished and noted for the benefit of a certain coinage, where it was in a very extensive radius the instrument of exchange most in favor, cities of the second or third order could not take into account. Their money circulated only within the limits of their narrow territory. Then nothing induced them either to follow the taste of the day by refining the types adopted at first, or even to substitute others for them, if the old had ceased to please. Thus no less than a half century (this mint does not appear to have been opened before 520 at earliest), Delphi placed the ram's head

on its coins, single or doubled, the head of the goat, a negro's head of careful work, the tripod and the patera.

It is the same in Thessaly, where coinage had not begun much before the Median wars. Most types of the face there allude to the fat pastures of the country and the fertility of its arable lands, while on the reverse in the sunken square, the sandal of Jason recalls the memory of the old local myths. At Larissa a horse lowers his head to the turf; above is a partridge or a cicada (Pl.VII,21). These recall the tall grass of the meadows filled with game, where passed in herds the horses, that the famous Thessalian horsemen mounted. Alsewhere is the head of a bull and of a bridled horse. There is also a nude hero, Jason or Thessalos with hat thrown back on his nape, who conquers a bull. On the reverse is a bridled horse (Pl.IV,7,14). At Pharsalus it is a head of Athena covered by an Attic helmet. On the reverse is the head and neck of a horse(Pl.IV,19,22). At Methydrion, a horse bounding and a head of barley. At Crannon, Pheres and Scotussa, is found the hero conqueror of the bull, the horse in various attitudes, the head of barley. All this coinage is that of a country of great cattle-breeding and rich culture.

In the vast region extending south of the Ripher mountains, now the Balkans, from the northern slopes to Olympus and the eastern slopes of Pindus to the shores of the Euxine, there dwelt in the time of the Median wars a number of tribes termed barbarians by the Greeks. From the little known or rather divined of a history never written, these tribes were divided in clans frequently at war with each other, and in the damp plains of the lower country about the mouths of the great rivers and in the high valleys of the enterior, they led a life that greatly resembled that in which the Albanians have been retarded till our days in the west of the Hellenic peninsula. The Greeks earnestly informed themselves about all that concerned the old civilizations of Egypt and of Asia, but were little interested in these anarchic and confused, that were concealed from their eyes behind a screen of marshes and dense forests. At most, struck by the strange orgiastic rites that characterized the cults of these mountaineers, they placed in Thrace the scene of certain adventures of Dionysos, and attributed them to this warlike and hunting people, deities, which they

confounded with Ares and Artemis. They also believed that some trace of Hermes and of his myths was found there.[1] With that exception, they did not seem to care much to injuire into the customs or even the names of the tribes that peopled the valleys of the Strymon, Nestos and Hebre. Herodotus alone with his curiosity always aroused, sought to collect some dada concerning the social condition and the customs of this Thracian nation, as he calls it, that occupied the area between the Egean and the Danube; he summarizes these in connection with his tale of the expedition that Megabyzus undertook in Europe at the order of Darius, but he passes over it quickly and does not emphasize it.[2]

Note 1.p.124. Herodotus.V.7. See VII, p.110-111, where is a question of a temple and an oracle of Dionysos, situated in the high mountains of Satres.

Note 2.p.124. The same. V, 3-10.

Yet in the 6 th century those tribes had already risen from the savage state. The Greeks had therefore initiated them in certain arts of civilized life. The transmission was made by the intermediary of Hellenic colonies on the coast, due to the commercial relations maintained with their indigenous neighbors. These had first learned to write; but from those masters they had not only borrowed the alphabet; they had very quickly appropriated the Lydo-Ionian invention of money. Everything advised them to borrow this. The richness of the silver mines of Mt. Pangeus had been revealed to them by Phoenician workings. They continued these, and however primitive that doubtless were the methods of extraction ecployed, they obtained the precious metal from those veins. They hastened to coin this metal to pay for the purchases made at the coast, and thus they struck coins when many cities in Greece itself had no mints yet. On many of those coins they placed legends attesting the existence of many tribes, whose names have not been preserved to us by any ancient text. This coinage of Macedonia and Thrace is very interesting by what it adds to our ethnographic knowledge, by the choice of types that have a very peculiar appearance, and by the style of the engraving. A last trait that characterizes those northern coins is their exceptional dimensions. Manw of them seem to be octodrachmas. Coiners did not have to economize silver; as it is said, they had it in abundance.

The diameter of the blanks further aided the work of the work-still rather novices.

The tribes known to us only by the legends of the coins are the Derronians, Orreskians and Zeleens. On the coins that reveal them to us are found types also found on those on which are read the names of the Edonians and Bisaltes, that are mentioned by the Greek historians. This relationship of types gives reaso to think that all those tribes inhabited the same country around Mt. Pangeus. The coins struck by one of them circulated among their neighbors. As for the types, most seem to refer to the labors of the field and to raising cattle. There is a person armed with a whip and seated in a chariot drawn by one or two oxen. On the examples best struck are distinguished the willow rods of which is made the body of the chariot. Above the team and in the field is a Greek helmet with long plume. A type that seemed to have obtained even greater favor is that of a nude and bearded man, walking between two oxen that he leads to the right. He is covered by the causis or Macedonian cap, a tress of plaited hair hangs on his back; he places his right hand on the rump of one of the oxen; with the advanced left arm and closed fist, he subdues the other animal held by a thong and raising its head. The last type comprises many varieties. The reverse of these pieces is sometimes entirely flat and nearly smooth. Further in the shallow sunken square is seen the triskele, a horseman, a wheel, or merely four equal squares. One hesitates in the interpretation proposed for this type of oxherd, that appears of have been so popular among the tribes of Pangeus. The two javelins held in the hand on some of these coins and the nudity always found, advise one to see there instead of a simple driver of oxen, rather a conqueror that comes to subdue and subject to the yoke for the first time wild bulls. This would be the same god or hero, the patron of the laborers, a sort of Thracian Triptolemus, that it is necessary to recognize in the nude personage that drives the chariot; he will there be represented in a different attitude of repose, when on the morrow of his exploit, he walks through the fields that he has made fertile. One would be tempted to believe that the natives, obedient even to a suggestion comiug to them from some city on the

coast, at least in places who sought to identify their god of [illegible] los in the right hand a caduceus (Pl.IV.8).[1]

[illegible] that the type of this coin represents Hermes driving off the oxen of Apollo, as related by the Homeric hymn. It seems to us doubtful that this purely Greek myth penetrated among these [illegible] ly of a Hermes, promoter and patron of the most necessary [illegible]

On the coins of the Orrestrians with the type of this divin- [illegible] arms a maenad (Pl.IV.12). For the first of these types, some- times pulling on the bit he seems to restrain the horse that attempts to snort and rear. Also the lover of the maenad is a [illegible] sometimes appears to chat with the woman. Elsewhere he seizes [illegible]

The execution of all these images is marked by an energy that does not lack a certain zest. The reliefs of the body are ren- dered with an exaggeration in which is felt a sincere effort, still very awkward, to attain the truth. The movements of the man and of the animals are correct and even have a certain lif[illegible] We believe it an error to desire, as proposed, to find someth- ing of the qualities and defects of this execution in the sty[illegible] of the artists Polygnotus of Thasos and Paeonios of Mende, who in the 5 th century left northern Greece and went to work at Athens and Olympia.[1] Yet this execution has its originality, that is perhaps explained by even the character of the people [illegible] Thracians must place in their first essays in relief someth[illegible] [illegible]

Note 1.p.127. This is the theory formerly stated by H. Br[illegible] in his Memoir entitled:- Paeonios und die Nordgriechen Kunst. [illegible]

coast, at least in places had sought to identify their god of agriculture with the Grecian Hermes, inventor of the useful arts. This may be supposed from a coin of the Derrovians, unique so far, where the man on foot that walks near the oxen holds in the right hand a caduceus (Pl.IV,8).[1]

Note 1.p.126. Babelon (Traite.Part II. Vol.I,p.1033) prefers that the type of this coin represents Hermes driving off the oxen of Apollo, as related by the Homeric hymn. It seems to us doubtful that this purely Greek myth penetrated among these b barbarians, while they might have heard some one speak vaguely of a Hermes, promoter and patron of the most necessary arts.

On the coins of the Orrestrians with the type of this divine oxherd, there is seen to appear two other types comprising numerous variants, that of a horseman standing on the ground near his horse, and that of an impetuous ravisher bearing in his arms a menad (Pl.IV,12). For the first of these types, sometimes pulling on the bit he seeks to restrain the horse that a attempts to snort and rear. Also the lover of the menad is a centaur on the coinage of the tribes of the interior. On that of Lete, a city of Mygdonia, this is an ithyphallic satyr. He sometimes appears to chat with the woman. Elsewhere he seizes her by the wrist or carries his hand to her chin (Pl.IV,20).

The execution of all these images is marked by an energy that does not lack a certain zest. The reliefs of the body are rendered with an exaggeration in which is felt a sincere effort, still very awkward, to attain the truth. The movements of the man and of the animals are correct and even have a certain fire. We believe it an error to desire, as proposed, to find something of the qualities and defects of this execution in the style of the artists Polygnotus of Thasos and Paeonios of Mende, who in the 5 th century left northern Greece and went to work at Athens and Olympia.[1] Yet this execution has its originality, that is perhaps explained by even the character of the people for whom were engraved these coins. Passionate and sensual, the Thracians must place in their first essays in relief something of the violent instincts natural to them. Had their art survived, it would have been boldly realistic and a little brutal.

Note 1.p.127. This is the theory formerly stated by H. Brunn in his Memoir entitled:- Paeonios und die Nordgriechen Kunst. (Kleine Schriften,Vol. II,p.184-200). It is scarcely maintain-

[illegible] observations.

[illegible] the first king of Macedonia to strike coins on which he inscribed his name; he reigned from [illegible]. Those of his pieces regarded as most ancient continue the [illegible] the causia and clothed in a short chlamys; he holds two spears [illegible] on the reverse a bust of a goat, as canting arms of that city. (Pl.IV,26,25). Note the proud bearing of the horse, the easy [illegible] petition of the Greeks to whom he claimed to belong, when as a descendant of Hercules, he demanded the right to have a chariot race in the arena of Olympia. These coins belong to the [illegible] etas and Ageladas.

On the other hand, the coinage of cities of Chalcidice and [illegible] satyr that assaults a nymph (Pl.IV,16). The motive is entirely [illegible] or have the Thasians borrowed from their continental neighbo[illegible] the team that he causes to walk in steps, is found again at [illegible] the chariot and in the field is a shield instead of a helmet. In the lion devouring a bull on the coins of Acanthus and of Abdera (Pl.IV,2) and in the rampant lion on the coins of Chersonessus, it is perhaps necessary to see an allusion to the

maintained today; yet this study no less contains many just o observations.

Alexander I was the first king of Macedonia to strike coins on which he inscribed his name; he reigned from 498 to 454. Those of his pieces regarded as most ancient continue the coinage of the Bisaltes, whose territory and mines had been annexed to his States; they are of the type of a warrior standing near his horse; but then for other pieces also signed he adopted the type of the horseman walking. This rider is crowned by the causia and clothed in a short chlamys; he holds two spears in his right hand. These coins must have been struck at Aegae, which was the capital of the kingdom before Pydna; they have on the reverse a bust of a goat, as canting arms of that city. (Pl.IV,26,23). Note the proud bearing of the horse, the easy pose of the rider, and the picturesque character of the goat. Greek historians give this Alexander the surname of Philhellene. It may be believed that he made the first appeal to the competition of the Greeks to whom he claimed to belong, when as a descendant of Hercules, he demanded the right to have a chariot race in the arena of Olympia. These coins belong to the last years of that long reign. They must have been engraved by Greek artists, contemporaneous with the pupils of sculptors like Onatas and Ageladas.

On the other hand, the coinage of cities of Chalcidicesand of the islands near the coast recall in certain respects that of the Thracian tribes with which the Greek colonists were in commercial relations. Thus is found at Thasos the type of the satyr that assaults a nymph (Pl.IV,16). The motive is entirely similar; the execution is vere similar in both; but the modeling on the coins of Thasos is more distinct than on those of the Orreskians. Did they awkwardly copy the coins of Thasos, or have the Thasians borrowed from their continental neighbors a type, whose execution they perfected? It is difficult to say. The personage seated in a chariot and raising his whip over the team that he causes to walk in steps, is found again at Olynthe (Pl.IV,6;Reverse, Pl.VII,9); but there horses draw the chariot and in the field is a shield instead of a helmet. In the lion devouring a bull on the coins of Acanthus and of Abdera (Pl.IV,2) and in the rampant lion on the coins of Chersonesus, it is perhaps necessary to see an allusion to the

ravages caused by those carnivora in Thrace; when Xerxes passed there with his army, they devoured many of his camels. In the same country were also wild bulls, whose heads were ornamented by horns, that by their enormous size astonished the Greeks, to whom the native hunters came to sell them.[1] They must more than once have witnessed in their native forests the unequal combat represented on the face of the coinage of Acanthus. With a rapid bound, the lion sprang on the back of the bull. He was surprised, However strong he might be, he succumbed under the clasp of the paws and the teeth that tore his flesh.

Note 1.p.128. Herodotus. VII, 125, 126.

The series of these coins is interesting to study. The first have a very archaic appearance with the heavy dots, the lines by which the engraver sought to render the hair of the lion and the dewlap of the bull. These too minute indications have disappeared from the more recent. The execution is very broad and the modeling is very careful. Between these two coins is the same difference as between two fragments of groups, where Attic sculptors have treated the same theme.[2] One of these monuments is doubtless earlier than 550; the other must date from the second half of the century. The staters of Acanthus are very common; one can follow in them the development of the style. located at the bottom of a gulf well protected against w winds and very near the mines of Mygdonia, Acanthus must have early attained a high degree of wealth.

Note 2.p.128. Histoire de l'Art. Vol.VIII,Figs. 278,282.

The city of that region with Acanthus, that had the most important coinage was abdera, situated near the mouth of the Nestos A colony of Teos, it copied the griffin of its metropolis and its slightly affected elegance. On the contrary, that the city of Dicea near Abdera placed on its coins, one recovers the fabrication of the most ancient staters of Acanthus, the same seeking for energy, in the modeling, the same processes of rendering. (Pl.VII,17,18).

Several islands of the Egean sea were early commercial centres, very prosperous and sources of art. From the 8 th century, the Ionians scattered throughout the entire archipelago of the Cyclades assembled at the festivals of Delos. One would expect to find on those shores coins, whose style would seem to be affected by the examples given to the engraver in the course

of the 6 th century by the sculptors of Paros and of Naxos, that went to initiate the Attics in working marble. The ty[illegible] that we have rightly assigned to these islands do not correspond to this expectation. Because in most of these islands [illegible] relations with Ionia, men had begun very early to strike coins. Then they remained faithful to the very simple types [illegible] lar pieces of massive appearance. The types most frequently found are the amphora or the grapes; olives and vines [illegible] formed the chief wealth of those isles. Melos has the [illegible] nate, a canting emblem. There places the column on its coin. [illegible] tle band and raised at the nape. On the reverse is the flying [illegible] Siphnians, enriched by mines of gold and silver, had [illegible] those serving the mints of the adjacent islands. By its [illegible] and the purity of its lines, this profile recalls [illegible] of the monuments of Attic statuary, that seem to have been executed a very brief time before the sack of the Acropolis.[1]

The type on the coins of Delos is presented with care. As [illegible] a rare type is noted the frog of the coinage of Seriphos, (Fig. 73). The frog was connected with Apollo.

[illegible]

The cities of Crete only commenced to coin money after the Median wars. Cnossos seems to be the only city whose coins date earlier than 480. There are coins of Cnossos of very archaic appearance. There is already found the type that [illegible] Minotaur in the conventional attitude of running; he holds [illegible] (Pl. IV, 10, 13).

Like that of Cnossos, the coinage of Cyrene offers very lit[illegible] more or less summarized, of the medicinal plant silphion, [illegible] roots and seeds were exported to the entire Grecian world [illegible] formed one of the riches of the colony. On these coins first appeared in pairs the seeds of the shrub, and then a little

of the 6 th century by the sculptors of Paros and of Naxos, that went to initiate the Attics in working marble. The pieces that we have rightly assigned to these islands do not correspond to this expedition. Because in most of those islands in close relations with Ionia, men had begun very early to strike coins. Then they remained faithful to the very simple types first adopted. The coinage of those islands consists of globular pieces of massive appearance. The types most frequently found are the amphora or the grapes; olives and vines then formed the chief wealth of those isles. Melos has the pomegranate, a carting emblem. There places the dolphin on its coins, a type suited to an island city. I only see in all this series but a single coin that truly has art, merit, that of Siphnos. On the face is the head of Apollo, the hair enclosed by a little band and raised at the nape. On the reverse is the flying eagle (Pl.V.12,21). One would be tempted to believe that the Siphnians, enriched by mines of gold and silver, had ensured the services of engravers, that were more skilful artists than those serving the mints of the adjacent islands. By its noble air and the purity of its lines, this profile recalls those of the monuments of Attic statuary, that seem to have been executed a very bried time before the sack of the Acropolis.[1] The lyre on the coins of Delos is presented with care. As quite a rare type is noted the frog of the coinage of Seriplos. (Fig. 78). The frog has connected with Apollo.

Note 1.p.129. Histoire de l'Art.VOl.VIII,Figs.299,347.

The cities of Crete only commenced to coin money after the Median wars. Cnossos seems to be the only city whose coinage dates earlier than 480. There are coins of Cnossos of very archaic appearance. There is already found the type that Cnossos will retain till under the Roman empire. On the face is the Minotaur in the conventional attitude of running; he holds a great stone. On the reverse are frets thought to represent the Labyrinth of Crete (Pl.IV,10,13).

Like that of Cnossos, the coinage of Cyrene offers very little variety. Everywhere is seen to recur on the face the image more or less summarized, of the medicinal plant silphium, whose roots and seeds were exported to the entire Grecian world, and formed one of the riches of the colony. On these coins first appeared in pairs the seeds of the shrub, and then a little

[illegible]. As if that opulent city had felt the desire to vary the appearance of its coinage, it ended by placing on the reverse of [illegible] eagle devouring a serpent, a hand, or a head of Zeus Ammon [illegible] gances of the [illegible], which the imagination of the Greek [illegible] les and the nymph Cyrene. Hercules is standing, [illegible] ing the fruit of the silphium from a stem with three [illegible] little island of Siphnos. It will only be in the second half of the 5 th century that the great African colony will have coins, that by their execution will accord with the situation that it occupied in the Greek world. Her engravers will then know how to give a beautiful character to that head of Zeus Ammon, which her predecessors had already placed on the most ancient pieces of Cyrenaica.

[illegible] in the West.

In Asian Greece have we seen coinage originate. Then we have seen successively opened mints for striking it in the islands [illegible] but the movement that extended this tendency from east to west [illegible] beyond the narrow Adriatic and by the broad ways of the Mediterranean to the distant colonies scattered over the coasts of Italy and Sicily, and even to those of Gaul and of Spain, [illegible] the use, that it could make of the new means of exchange. Its use was far from extending as rapidly as it would have done in our days. Doubtless, by the assemblage of all the scattered sons of the Hellenic race at the great games of the isthmus and of Olympia, to which men went so far, especially by [illegible]

later the shrub itself with its leaves and fruits.(Pl.VI,22). As if that opulent city had felt the desire to vary the appearance of its coinage, it ended by placing on the reverse of its pieces different types in the sunken square, a star, an eagle devouring a serpent, a hind, or a head of Zeus Ammon with ram's horns. That reverse for which the engraver seems to have taken most trouble seems to represent a scene from the garden of the hesperides, which the imagination of the Greeks placed in that region (Pl.VII,23). There are recognized Hercules and the nymph Cyrene. Hercules is standing, covered by the lion's skin and leaning on his club with the left hand. On another piece is seen the same nymph seated on a throne and picking the fruit of the silphium from a stem with three rows of leaves rising before her; but for merit of style, none of these coins is comparable to the stater furnished to us by the little island of Siphnos. It will only be in the second half of the 5 th century that the great African colony will have coins, that by their execution will accord with the situation that it occupied in the Greek world. Her engravers will then know how to give a beautiful character to that head of Zeus Ammon, which her predecessors had already placed on the most ancient pieces of Cyrenaica.

4. Hellenic West: Magna Grecia; Sicily; Greek Colonies in the West.

In Asian Greece have we seen coinage originate. Then we have seen successively opened mints for striking it in the islands and on the coasts of the Egean sea and in all European Greece; but the movement that extended this tendency from eart to west could not stop in that direction. It could not fail to extend beyond the narrow Adriatic and by the broad ways of the Mediterranean to the distant colonies scattered over the coasts of Italy and Sicily, and even to those of Gaul and of Spain, by the adventurous boldness of Chilcidians, Corinthians and Phoceans; yet though the Greek spirit was slow in comprehending the use, that it could make of the new means of exchange, its use was far from extending as rapidly as it would have done in our days. Doubtless, by the assemblage of all the scattered sons of the Hellenic race at the great games of the isthmus and of Olympia, to which men went so far, especially by the

flotillas of swift ships, that after the season of storms, darted in all directions in each spring to renew the bonds of affiliation and of commerce by which so many cities were connected, which rarely communicated except by sea, the new ideas flew quickly on the wings of Greek ships from the columns of Hercules to the back of the Euxine sea, from Cyrene to Marseilles and Adria. Yet however mobile this was in its first expansion, the young and living world of adolescent Greece, the rapidity of this transmission was not comparable to that in the modern world, to that benefiting every invention which comes by a stroke of genius to profoundly modify existence in civilized societies. Greece had neither railways, steam navigation, not telegraphs. It was necessary for her to count more on time and distances.

In these conditions, we cannot be surprised to have to state, that more than a century passed from the time when at Miletus and Ephesus was made the first trial of coined money, and that when the Greek cities of the West decided to strike coins. Yet when they resolved to do this, several of those cities had already attained a high degree of prosperity; then one is tempted to be astonished at first sight, that they could wait so long to assure themselves of the advantages of a monetary circulation suited to their convenience. What explains this delay, even more than their distance from the centres of Hellenic life, is the situation occupied on the coast of a country whose entire interior was occupied by peoples termed barbarians by the Greeks. The commerce carried on by them with these adjacent tribes was one of barter; they could not do without money; but on the other hand, in cities with such an intense life, they must feel that they would gain by having a coinage, that simplified transactions on local markets and facilitated exchanges between places. Men doubtless commenced by requiring these services from coinage of foreign origin, from that which the metropolises of all the colonies had for many years issued in great abundance. Bankers and changers, the tripezites, on the tables to which was due the appellation serving to designate them, offered in piles to their patrons eagles of Chalcis, Gorgons of Eretria, Pegasuses of Corinth, also perhaps turtles of Egina, the current money of Peloponessus. Each merchant only had to choose in all this specie the coins that would bear a

premium in cities where he intended to make purchases.

Yet it was a servitude and trouble to depend thos on mints, that one can neither regulate nor foreseee the production, to be compelled always to employ in business coins struck according to very different standards. The currency of this money must continually vary, according to the importance of receipts and of demands. The inconveniences of this condition were apparent. Men could not resign themselves to suffer them indefinitely on all that eastern coast of Italy, where was planted se vigorously Hellenic civilization, and in the great adjacent island in which et flourished with no less splendor. Then came the time when the principal cities of Magna Grecia and of Sicily undertook to open mints at about the same time. These mints seem to have become active only about 550 or 540. The appearance of these coins, the style of their effigies, the alphabet of their legends, all concur in suggesting to numismatists the adoption of that date for the commencement of this coining.

A coinage introduced at such a late date could not present the same character as that of the country in which were made the first attempts in coinage. Cities like Tarente, Sybaris and Syracuse could bring from the outside to establish their first mints, workmen that in well equipped mints were initiated in all the refinements of the monetary art. The pupils trained by these masters had no need of long apprentichship, Much before the end of the 6 th century in all these rich cities of southern Italy and of Sicily, the various arts of metal were practised with talent and success. Men cast, made repoussee work, chased bronze and silver, indiad in bronze. Sybaris was destroyed in 510, but was famed throughout Greece for its wealth, the child of its industry. It exported to the Etruscans those tripods and other furnituee of luxury with which were equipped their festal halls. Here then at the origin of the series of coins was found nothing resembling the thick ingots of Ionia, punched with images often nearly indistinct and all covered by countermarks, even nothing that had the weight of the most ancient turtles of Egina. In western Greece the coinage thus never knew the experiments and the failures of the beginning. It was born adult, if one may so speak. There the first hour each could tell all its name and what city it represented. The type is there accompanied by a legend, that gives in full or abrid-

ged the name of that city.

Very far from having the massive appearance of the oldest coins of the ancient Asian and European Greece, the pieces of southern Italy in the form of broad disks, thin and flat as they appear, most nearly approach our modern coins; but what distinguishes them is, that these are badly struck coins, at least in the first times of coinage and for most cities. Some of these coins are sunken only in appearance. The sunken image on one side is the simple inverse of the relief on the other face. This reverse indeed produces on the whole the type of the face; yet it differs therefrom in some minor details. But the difference might escape a too rapid glance at the coin; yet it is not a work executed by the repoussee process, that must be recognized in the coins in question. These pieces assume the use of two dies, the type being engraved as sunken on one, while on the other it was in relief. One is right in affirming this for many pieces of Tarente, Sybaris, Posedonia and Crotona.[1] We shall cite only one example, borrowed from the coinage of Caulonia. On a stater of that city is seen on the face Apollo Catharsius, nude and standing, with the reversed legend Lyche, with a little genius placed on his arm and a stag before him. Same type on the reverse but without the legend. The little genius is also lacking. The stag occupies the same place as on the face; but behind the god is a stork in relief.(Pl.V,1,2).

Note 1.p.134. See text.

It is not alone by the form of the coin and by the mode of execution of the engraving, that there resemble each other all the coins of the Greek cities of Apulia, Lucania and Bruttia. There are between those cities other traits of relationship and more significant analogies. They belonged to the same monetary system in which all secondary pieces are fractions of a stater of 8.16 grammes. Finally, in that series of coins with sunken reverses are found a certain number on which are combined, divided between both sides of the coin, the types and legends of two different cities.[2] In this curious uniformity of the coinage that circulated from the gulf of Tarente to the strait of Messina, in the unity of standard that is the law of these coins, and not this combination on the same piece, of the images and inscriptions by which are characterized the

products of two distanct mints, is divined the result of an agreement established about the middle of the century for the creation of a sort of federal money, between the cities whose names are read on these pieces. When in this foreign Greece men finally resolved to strike coins, then adopted a method w whose reasons are easily seen. For the entire group of these cities that were in constant business relations, there would be great benefit if these coins that they prepared to strike could circulate in all southern Italy without need of exchanges and complex calculations. Most of those cities were Achaian colonies. All these assembled annually at the national festivals celebrated in the vicinity of Crotona, near the temple of Hera Lacinia. Perhaps there had been for a certain time a political alliance between these two cities, which was concluded under the influence of Pythagoras and disciples. This attempt for confederation struck against the competition of interset and of pride, which caused the bloody struggle in which Sybaris perished, crushed and destroyed by Crotona; bu it had lasted long enough, that there were rooted customs which would not disappear on the morrow of the day of the rupture of the agreement by which they were born. Tarente, a Dorian colony, and Rhegion, a Chalcidian colony, judging from the rarity of their joint coins, very quickly withdrew from the agreement into which then entered at first, but the group of Achaian cities remained faithful to it for a number of years, until the time when the progress of taste and perhaps also economic considerations advised the abandonment of a procedure, that had found no imitators outside the country in which the public tad so strongly taken it into favor.

By the systematic use made of sunken images, this Greco-Italian coinage became singular, and this made it more difficult to place its pieces on foreign markets; but by that fancy it frsm the first announced itself as the product of an art still restricted by some conventions and not freed from all constraint, already entered into full liberty of faithful interpretation. Figures of real or factitious animals were nearly all the themes, that the most ancient coiners of Ionia and of Greece risked treating. If they dared to attempt the human figure, as they sometimes did in northern Greece, in the rendering of the form and movement is an exaggeration and a strange awkwardness.

at most in Corinth and elsewhere, they already succeeded in
[illegible]
[illegible]
[illegible]
had higher ambitions, served by a very superior talent of exe-
cution. His repertory is more varied: he assigns a great place
to the nude male body, the bodies of the ephebes which contem-
porary sculptors studied so passionately, and that the succes-
[illegible]
[illegible]
and of heros, of goddesses and nymphs are varied; some assert
[illegible]

See the coin in the rich staters of Tarente classed first
[illegible]
[illegible]
enclosed by a cane. With the right hand he carries to his face
[illegible]
[illegible]
[illegible]
however complicated his attitude, it is not stiff. There is
[illegible]
between the members and trunk is very correct. Its modeling is
well conceived; but it was executed with some lack of skill.
By three great projections like balls has he marked the relief
of the shoulder and of the breast. He used the drill for this
purpose and it served him badly. In the same mind, when the
[illegible]
He might almost be reproached with having sometimes slightly
been careless on coins, where with the type of Taras on a dol-
[illegible]
so that one cannot say whether it be male or female.(Pl.IX,1,
2,3). This same science of movement and of form is found in
[illegible]
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two divine personages have a proud bearing with a slightly the-
atrical pose. In the effort made by a tool to firmly accent the
[illegible]
imitation of the best statues of the epoch. Same qualities are
on the coins of Metaponte on which is represented on the face

the

At most in Corinth and elsewhere, they already succeeded in p placing in the circle of the coin the head of a man or woman, that suited well the outline and had a very happy effect. In Magna Grecia and especially in Sicily, the engraver at first had higher ambitions, served by a very superior talent of execution. His repertory is more varied; he assigns a great place to the nude male body, the bodies of the ephebes which contemporary sculptors studied so passionately, and that the succeeded better and better in seizing and in rendering its inflexions and beauty. Under his skilful graver, the heads of gods and of heros, of goddesses and nymphs are varied; some assume more nobility and majesty, others more charm and amiable elegance

See the coin in the rich staters of Tarente classed first in order of age (Pl.V,18). On the face is Apollo Hyacinthios nude and kneeling with the right leg advanced. His head is enclosed by a band. With the right hand he carries to his face a flower and seems to inhale its perfume. In the left hand he holds his lyre under his armpit; on the reverse is the same type without the lengend Taras and the flower. Apollo is nude. However complicated his attitude, it is not stiff. There is even grace in the movement of the right arm. The proportion between the members and trunk is very correct. Its modeling is well conceived; but it was executed with some lack of skill. By three great projections like balls has he marked the relief of the shoulder and of the breast. He used the drill for this purpose and it served him badly. In the same mint, when the sunken reverse was renounced, the form soon becomes more supple. He might almost be reproached with having sometimes slightly been careless on coins, where with the type of Taras on a dolphin alternates either with a hippocampus or a youthful head, so that one cannot say whether it be male or female.(PL.IX,1, 2,3). This same science of movement and of form is found in P Poseidon brandishing his trident at Poseidonia(Pl.VI,16,18); and in the Apollo cathrasios of Caulonia (Pl.V,1;VI,6). The two divine personages have a proud bearing with a slightly theatrical pose. In the effort made by a tool to firmly accent the larger divisions of the bony framework is felt an intelligent imitation of the best statues of the epoch. Same qualities are on the coins of Metaponte on which is represented on the face

the

the river Acheloos. Acheloos is rearbed with a front view. [illegible]
horns rise on his brow.(Pl. V.5).

[illegible]
VIII,16); but the mint then producing the best works of th[illegible]
kind in Lucania was that of the city, that first gave itself
on its coins the name of Yele, which the Romans called Velia.
[illegible]
Phoceans founded it a little after 544, when most of the pop-
ulation embarked on its fleet and sailed west to flee [illegible]
[illegible]
11). The artist has no less the certainty of his hand in the
images placed on the reverse. These are sometimes a lion walk-
ing with open jaws and sometimes a lion's muzzle (Pl.VI,14).
In both of these types the style is very broad and the touch
very energetic. Elsewhere in the series of Magna Grecia are
other fine figures of various animals, the bull at Siris, [illegible]
[illegible]
most curious of all those images is that of the bull with hu-
man head, which Laos placed on its staters. It has a long [illegible]
[illegible]
enclosed by a band. At Kresion is found the same bull with hu-
man head; but it is less distinctly characterized. There [illegible]
[illegible]
rce of their sudden treasures.

By the specimens given of the coinage, one can appreciate
the interest and variety offered; thus some surprise is felt
[illegible]
chaic period form the products of the mints of Metaponte and
Crotona. Those two cities rivaled Tarente and Sybaris in impor-
tance and wealth. At Metaponte is indeed the beautiful pie-
ce face of which we have reproduced (Pl.V,3); but it is a [illegible]
of its kind. The inscription that it bears is the "prize o[illegible]
Acheloos," and indicates its commemorative character. It was
struck on the occasion of the games which that city celeb-
in honor of Acheloos, father of the Streams, creator of all ny-
mphs, inventor of the mixture of water and of wine. Since [illegible]
Selcon personifies salt water and Acheloos fresh water, [illegible]
the benefit and power of its spouting and of its course [illegible]

the river Acheloos. Acheloss is bearded with a front view. Bull horns rise on his brow.(Pl. V,3).

The youthful head on the staters of Tarente is elegant (Pl. VIII,16); but the mint then producing the best works of that kind in Lucania was that of the city, that first gave itself on its coins the name of Yele, which the Romans called Velia. It was the latest of the Geeek colonies of that country. The Phoceans founded it a little after 544, when most of the population embarked on its fleet and sailed west to flee Persoan domination. There is both charm and severity in the profile of the nymph ornamenting the face of the staters of Velia (Pl.VI, 11). The artist has no less the certainty of his hand in the images placed on the reverse. These are sometimes a lion walking with open jaws and sometimes a lion's muzzle (Pl.VI,14). In both of these types the style is very broad and the touch very energetic. Elsewhere in the series of Magna Grecia are other fine figures of various animals, the bull at Siris, Sybaris, Laos and Rhegion, and the hare in the latter city. The most curious of all those images is that of the bull with human head, which Laos placed on its staters. It has a long beard, hair frizzed on the brow, horns projecting forward and the head enclosed by a band. At Rhegion is found the same bull with human head; but it is less distinctly characterized. There as at Laos, it represents the short torrents descending by great leaps from the crests of the Apennines, and the irresistible force of their sudden freshets.

By the specimens given of the coinage, one can appreciate the interest and variety offered; thus some surprise is felt when the eyes are cast on the series of coins, that in the archaic period form the products of the mints of Metaponte and of Crotona. Those two cities rivaled Tarente and Sybaris in importance and wealth. At Metaponte is indeed the beautiful piece, one face of which we have reproduced (Pl.V,3); but it is alone of its kind. The inscription that it bears is the "prize of A Acheloos," and indicates its commemorative character. It was struck on the occasion of the games which that city celebrated in honor of Acheloos, father of the Sirens, creator of all springs, inventor of the mixture of water and of wine. Since Poseidon personifies salt water and Acheloos fresh water, hence the benefit and power of its spouting and of its course in rivers

[illegible]

It is the same for Crotona. On the face is never any other ty-

[illegible]

[illegible] at first the tripod, then the eagle and finally [illegible]

[illegible] square is the lion modeled in relief; but even on [illegible]

[illegible]

ne for other circles, Corinth and Athens. The wheat ear of [illegible]

ponte and the tripod of Crotona were well received by the [illegible]

tes of the interior, whose vines and forests, fields and [illegible]

were supplied the coast cities with a part of the merchandise

that they consumed and exported. It appeared also to the [illegible]

[illegible]

[illegible]

[illegible]

ly commenced very late to coin money. About 530 or 540 [illegible]

[illegible] of Chalcidice, Zancle, Naxos and Himera, gave an [illegible]

followed after several years by Selinonte, Agrigente and Syra-

cuse, then by Leontion, Segeste and Catana. About the year [illegible]

[illegible] agree to place the beginning of the Syracusan coinage. [illegible]

[illegible]

[illegible]. To establish them have been taken into account the [illegible]

[illegible]

[illegible]

by the texts engraved on marble and bronze at what time and [illegible]

[illegible]

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We do not find in Sicily the sunken coins of Magna Grecia.

This procedure was employed in the island only by a single ci-

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sea now crossed by railway trains on a ferry. But as at [illegible]

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Then this piece in this sense would rather be a medal than an ordinary coin. With this exception the most ancient coinage od Metaponte is only composed op sunken pieces, where the same t type is repeated on the face and reverse, that of the wheat ear recalling the fertility of this little State. (Pl.IX,7,8). It is the same for Crotona. On the face is never any other type than the tripod of Apollo (Pl.IK,5,6). On the reverse is sunken at first the tripod, then the eagle and finally in a s shallow square is the lion modeled in relief; but even on those last pieces that appear most recent, the execution is summary and soft. We have already given the explanation of this routine for other cities, Corinth and Athens. The wheat ear of Metaponte and the tripod of Crotona were well received by the tribes of the interior, whose mines and forests, fields and pastures supplied the coast cities with a part of the merchandize that they consumed and exported. It appeared wise to the sagacious merchants, that the Greek colonists should not interfere with customs in which they found their account.

Like the Greek cities of southern Italy, those of Sicily only commenced very late to coin money. About 550 or 540 the colonies of Chalcidice, Zancle, Naxos and Himera, gave an example followed after several years by Selinonte, Agrigente and Syracuse, then by Leontion, Segeste and Catana. About the year 500 men agree to place the beginning of the Syracusan coinage, that became so rich and brilliant. These dates are also only approximate. To establish them have been taken into account the style of the engraving and particularly the form in which are presented in the legend certain characters of the alphabet. We know by the texts engraved on marble and bronze at what time and in what part of Greece, a certain form has fallen into disuse and has been replaced by a different one. There are even toward t the middle or end of the series some pieces, which permit dating with more precision certain facts stated by the historians of antiquity.

We do not find in Sicily the sunken coins of Magna Grecia. This procedure was employed in the island only by a single city, Zancle. In adopting it, that city had imitated its very near neighbor, Rhegion, separated by the narrow strait of the sea now crossed by railway trains on a ferry, but as at Rhegion, this practice was soon abandoned at Zancle, which in 494

took the name of Messana, that it has retained almost without change to our days. Then subject to Anaxilas, who reigned over both shores of the strait, it reproduced the type of Rhegion with nearly the same legend; it copied the coins that on the face have a chariot harnessed to two mules, on the reverse [illegible] ing a hare running (Pl.II.27).

[illegible] that one has reason to regard as the oldest. On the first [illegible] the midst of a crescent representing the outline of the [illegible] [illegible] cribed by its shore (Pl.IX.4).[1] At Naxos, on one side is [illegible] [illegible] of grapes (Pl.IV.15), types obvious to those of the island of Naxos, which had supplied its contingent to the group of immigrants that founded the colony. At Himera it is the cock with [illegible] sts, before conquering the difficulties presented to them by [illegible] traits that defined the different species of animals. The cock is here very alive and well posed. The archaic character of the execution is much more marked in the Dionysos of the coins of Naxos (Pl.VI.12). Note his eye in front view with angle raised, his long nose, the thick mass of his beard ending in a [illegible] cots, and which is gathered in a mass falling on his nape.

[1] [illegible]

[illegible] the beginning it is distinguished by the type already found at Rhegion, that of a personage standing in a chariot (Pl.IV.3). Two horses are here harnessed to the chariot. On the reverse is a simple sunken square. With an issue that must have closely followed the preceding, there is seen to appear at the [illegible] of the chariot the female head, that men agree to recognize as [illegible] and of the mounted chariot will be exerted the talent of the [illegible]

took the name of Messana, that it has retained almost without change to our days. Then subject to Anaxilas, who reigned over both shores of the strait, it reproduced the type of Rhegion with nearly the same legend; it copied the coins that on the face have a chariot harnessed to two mules, on the reverse being a hare running (Pl.IX,17).

The themes are also not so complex in that Sicilian coinage, that one has reason to regard as the oldest. On the first issues of Zancle is nothing but a dolphin, symbol of the sea, in the midst of a crescent representing the outline of the admirable roadstead called the sickle by reason of the contour described by its shore (Pl.IX,4).[1] At Naxos, on one side is a bearded head of Bacchus (Pl.VI,12), on the other being a bunch of grapes (Pl.IV,15), types obvious to those of the island of Naxos, which had supplied its contingent to the group of immigrants that founded the colony. At Himera it is the cock with a sunken square on the reverse (Pl.IX,15,16). Everywhere artists, before conquering the difficulties presented to them by the interpretation of the human form, knew how to seize the t traits that defined the different species of animals. The cock is here very alive and well posed. The archaic character of t the execution is much more marked in the Diogenes of the coins of Naxos (Pl.VI,12). Note his eye in front view with augle much raised, his long nose, the thick mass of his beard ending in a point, the parallel locks of his hair, indicated by very fine dots, and which is gathered in a mass falling on his nape.

Note 1.p.138. Thucydides. VI,4.

Such is the starting point in Sicily; but to judge of the r rapidity of the advance made there by the monetary art, it is proper to consider particularly the coinage of Syracuse. From the beginning it is distinguished by the type already found at Rhegion, that of a personage standing in a chariot (Pl.IX,9). Two horses are here harnessed to thechariot. On the reverse is a simple sunken square. With an issue that must have closely followed the preceding, there is seen to appear at the centre of the chariot the female head, that men agree to recognize as that of the nymph Arethusa (Pl.IX,10). Henceforth during more than a century, on those two themes of the head of the nymph and of the mounted chariot will be exerted the talent of the engravers, to whom the great and glorious city will entrust

the execution of its coins. Artist after artist will apply himself to develop and perfect each of these themes, that he will join on all pieces. He will ornament the female head with jewels and vary its headdress; he will model its flesh with a delicacy and increasing knowledge; he will trace thereon purer p profile lines. As for the chariot, he will harness four horses to it, whose movements will be diversified, and above which he will cause a winged and light form to soar (Fig. 55). Images created by his graver will end by being sufficiently approved, that he will be authorized to attach his signature.

Between the years 500 and 480, the time had not yet arrived when the engraver obtained that reward of his effort; but the intelligent persistence in that effort made itself felt from that moment. It already presaged the coming masterpieces. In 485 Gelon, tyrant of Gela, took possession of Syracuse and established himself there. He enlarged and enriched Syracuse by transporting there a part of the inhabitants of Gela and of other Sicilian cities; he made it the capital of all southeast Sicily. In 488 at Olympia Gelon won the prize in the chariot race;[1] perhaps it was in the same year that his brother Hiero, his future successor at Syracuse, obtained in the race of mounted horses the first of his three Olympic victories.[1] All Greece echoed with the fame and glory of the Dinomeide princes, celebrated by the poets that made a business of singing of the victors at the great panhellenic games. Concerning this has been made a conjecture that appears very plausible; it would be on the occasion of those triumphs that Gelon's engravers modified a type already placed on Syracusan coinage; they added to it then the image of the goddess Nike at the top of the field. On most pieces this Nike flies toward the driver of the chariot and seems to offer him the crown held in her hand. Elsewhere she stands near the heads of the horses, or flying she accompanies them in their march forward (Pl.VI,3,4). On the other side is the head of Arethusa between 4 dolphins, that represent the waves of the sea. That the waters of the Alpheus are said to traverse without mixing, to spring forth at the edge of the island of Ortygia (Pl.VI,1). The execution of the die is very firm and already very free. There is flexibility in the movement of the driver. Standing in the chariot, enlarged by the long and close tunic in which is clothed the celebrated chari-

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engraved the die is already skilful and master of his graver.
Return to the reverse; see the Victory flying over the quadri-
ga; she has a singular lightness. In the little lion on the re-
verse, the originality of the outline of the feline is seized
[illegible]
with the mass of the forebody covered by a tufted mane.

From the time of an advanced archaism, Sicily has other beau-
tiful coins beside those of Syracuse. If Agrigente with her ea-
gle and its crab (Pl.IV.11.12), like Selinonte with her pars-
ley leaf on both sides of the piece (Pl.IV.15.16) had a very
coinage, if Leontion limited herself to copying Syracusan typ-
es, that Segeste and Gela also reproduced sometimes on one si-
of their coinage, Leontion, Catana and Gela yet offer types
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the reverse being the nymph Catana like a winged victory walk-
ing with great strides (Pl.VI.5). With the right hand held for-
ward, she as a long floating scarf; with the lowered left hand
she raises the folds of her tunic. The style is a very firm
one there; but there is more accent in the type repeated on
the face of nearly all coins of Gela, the forebody of a bull
with human head (Pl.VI.10). At Leontion is found on the reverse
a lion's muzzle surrounded by 4 barley grains (Pl.VI.14). The
type of the lion alludes to the name of the city. Like the wh-
eat ears of Metaponte the grains of barley recall the fertility
of the fields cultivated by the inhabitants of that city.

There was in the northwest of Sicily a city, Egeste or Segeste (the form of the name varying in the authors), that had been
at first the capital of a tribe called Elymians. Greek col-
[illegible]
come predominant, they built that beautiful Doric temple, whose
ruins now cause the admiration of travelers. From the first
years of the 5th century, to strongly affirm that they were
Greeks by race, they desired to have their own coinage. Entire-
ly surrounded by Phoenician agencies, Solunte, Panormus, Eryx
and Lilybaeum, Segeste in that region was like the advanced
of Hellenism; but while valiantly sustaining the struggle.

The lips are thick and the chin is a little heavy. In spite of these defects the whole has a very grand air. Particularly by certain details one feels by this piece, how the artist that engraved the die is already skilful and master of his graver. Return to the reverse; see the Victory flying over the quadriga; she has a singular lightness. In the little lion on the reverse, the originality of the outline of the feline is seized with rare accuracy. The reduction of the loins contrasts there with the mass of the forebody covered by a tufted mane.

From the time of an advanced archaism, Sicily has other beautiful coins beside those of Syracuse. If Agregente with her eagle and its crab (Pl.IX,11,12), like Selinonte with her parsley leaf on both sides of the piece (Pl.9@,13,14) had a very poor coinage, if Leontion limited herself to copying Syracusan types, that Segeste and Gela also reproduced sometimes on one side of their coinage, Leontion, Catana and Gela yet offer types not lacking interest. At Catana on the face is a bull with human head with long pendant beard(Pl.V,16), and a fish beneath, on the reverse being the nymph Catana like a winged victory walking with great strides (Pl.VI,5). With the right hand held forward, she as a long floating band; with the lowered left hand she raises the folds of her tunic. The style is a very firm o one there; but there is more accent in the type repeated on t the face of nearly all coins of Gela, the forebody of a bull with human head (Pl.VI,10). At leontion is found on the reverse a lion's muzzle surrounded by 4 barley grains (Pl.VI,14). The type of the lion alludes to the name of the city. Like the wheat ears of Metaponte the grains of barley recall the fertility of the fields cultivated by the inhabitants of that city.

There was in the northwest of Sicily a city, Egeste or Segeste (the form of the name varying in the authors), that had been at first the capital of a tribe called Elymians. Greek colonists established themselves there. When their influence had become predominant, they built that beautiful Doric temple, whose ruins now cause the admiration of travelers..From the first y years of the 6 th century, to strongly affirm that they were Greeks by race, they desired to have their own coinage. Entirely surrounded by Phoenician agencies, Solunte, Panormus, Eryx and Lilypeum, Segeste in that region was like the advanced post of Hellenism; but while valiantly sustaining the struggle, had

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be acts of a real double team, it is necessary to count the legs. On the coin of Syracuse the second horse proves his existence by an abrupt movement of the head. This is held back and [illegible] has a sketch of the beautiful arrangement that will end in the [illegible] ly forcing the perspective of the side view, Simon and Eumenes succeeded in grouping thus the horses of a quadriga, so that [illegible] to each of these 4 coursers springing at a gallop, they gave a movement of the legs, crest, head and neck, that distinguishes it from its neighbour, a movement which one felt all the [illegible] artist of the time of Gelon would have cared to play with the difficulty thus; but the engravers of dies of Gelon's [illegible] cessive already dating more than a century earlier, which contained the germ of its present ease.

[illegible] the part due to the size of the head. The eye is exquisitely modeled. The iris is visible between the eyelids widely opened, and it lights the entire face. The mouth is very fine, and the movement of the chin clears all the lower part of the face. Still does not there exclude charm. On the didrachmes and tetradrachmes contemporaneous with Gelon, the engraver could not yet attain this perfection. Take the most careful of all his work, [illegible] has the brow enclosed by a laurel crown (Pl.VI,2,3). The trace of the conventions of archaism are still perceptible [illegible] in the rendering of the hair. This is applied on the temple in thick bands. Parallel stries groove the part covering the top of the head and continue on the compact mass according to the type. As for the eye, the engraver has not yet succeeded in frankly presenting it in profile, and has not cut [illegible]

charioteer of Delphi, he leans forward to give the reins to h his coursers, which he has brought to a walk after the finish of the race. On the coins of Rhegion and of Messana, the second horse is completely hidden by the one nearest the spectator. To be sure of a real double team, it is necessary to count the l legs. On the coin of Syracuse the second horse proves his existence by an abrupt movement of the head. This is held back and rises above the neck of the animal in front.(Pl.VI,3). Thus one has a sketch of the beautiful arrangement that will end by the successive labors of several generations of artists. By slightly forcing the perspective of the side view, Konon and Evenetos succeeded in grouping thus the horses of a quadriga, so that each one from head to ground was entirely visible to the eye. To each of those 4 coursers springing at a gallop, they gave a movement of the legs, chest, head and neck, that distinguished him from his neighbor, a movement in which one felt all the s spirit of the race, manifested in various ways (Fig. 55). No artist of the time of Gelon would have dared to play with the difficulty thus; but the engravers of dies of Denys the elder, when they succeeded in winning this wager, only drew from a m motive already dating more than a century earlier, which contained the germ of its primary data.

It is the same for the so-called head of Arethusa. In the m medallion of Evenetos, the free abundance of the tresses of t the hair adds to the size of the head. The eye is exquisitely modeled. The iris is visible between the eyelids widely opened, and it lights the entire face. The mouth is very fine, and the retreat of the chin clears all the lower part of the face. Size does not there exclude charm. On the didrachmas and tetradrachmas contemporaneous with Gelon, the engraver could not yet attain this perfection. Take the most careful of all his work, the decadrachma known by the name of Demaretion, that where Arethusa has the brow enclosed by a laurel crown (Pl.VI,2,7). The trace of the conventions of archaism are still perceptible there. There is the same dryness and an exaggerated symmetry in the rendering of the hair. This is applied on the temples in broad bands. Parallel strias groove the part covering the top of the head and continue on the compact mass adhering to the nape. As for the eye, the engraver has not yet succeeded in frankly presenting it in profile, and has not put light in it.

still assimilated the indigenous element in only incomplete f fashion. This produces the complication and singularity of the legends on the coinage of Segeste, deciphered only with difficulty.[1] As for the types of this coinage, one of them is the head of a woman and only an imitation of the Syracusan type of Arethusa (Pl.V,8); but the other is original. There is recognized the river god Crimisos, who according to a local myth was united to the nymph Segesta and became the father and founder of the city. The Segestans had deified the torrent near the city, but instead of giving Crimisos the form of a bull, accoording to the custom generally adopted for that kind of representation, under the form of a dog they personified the violence of the liquid element (Pl.V,6). Greek artists nowhere else took that method, that I know of.

Note 1.p.142. Babelon. Traite.PartII.Vol.I, p.1558-1560.

Like the cock of Himera, the dog of Segeste was very welcome. If the Sicilian engravers had already triumphed over nearly all difficulties presented to them in the interpretation of the human figure, for a stronger reason they excelled in seizing the traits characterizing the different types of the animal form. On a coin of Messana, on one side is the head of a bull, on t the other being the muzzle of a lion (Pl.V,5,14); this having a very free relief and very firm accent. This mask of a lion is found again, but then in profile, on the reverse of the coins of Leontion (Pl.VI,14); it is drawn there with no less energetic boldness. The image of the horse is sometimes harnessed and sometimes mounted, for example on a coin of Gela (Pl.VI, 16), and constantly returns on that coinage; it is almost everywhere faithful to nature there. The proportions of the body and members are very correct. The projection of the shoulder is detached from the roundness of the flank that is effaced. The horse walks easily and carries his head well.

In the course of the survey that we have made of the products of the monetary art at its beginning, in western Greece, Italy and Sicily, have we found the most advanced works. There is t the most freedom in the work and the most purity in the lines, the modeling of the nudes is most knowing and the heads have most nobility. By the composition of the types and by the execution of the engraving, the coins of Syracuse excel all that we have found in Asian Greece and in the Hellenic peninsula.

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ers so quickly surpass in skill and sureness of hand those of
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at Argos and Sicyon, then at Athens. For the entire archaic
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Clearchos of Rhegion. Authors have not preserved to us the
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at Rhegion, Gela and Syracuse desired to be represented in t
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won in the great national games, they ordered from the
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ots and statues.[1] In the little remaining from the reliefs dec-
orating the friezes of the Sicilian temples, we have believe
ourselves correct in seeing merely the aid of a sort of provi-
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to the historian to have to recognize this superiority of the
coinage of western Greece, and particularly that of the Sicil-
ian coinage, which attains its most finished form in that of
Syracuse.

Note 1. p.144. Histoire de l'Art. Vol. VIII. p.505-508.

Note 2. p.144. The same. Vol. VIII. p. 505.

However little one reflects on this, he thinks that he
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Phocea, Melos and Chalcis, Corinth and Athens, did not
humor and habits of customers accustomed to the old type
their first coinage. In opening their minds, they had
thought, of obtaining from their engravers types as beautiful
as possible. The general tendency of the work and its art

This is a phenomenon that does not fail to astonish. That this western coinage having commenced late never knew the awkwardness of first attempts, that it attained at the very first a h higher average is understood; but why did the Sicilian engravers so quickly surpass in skill and sureness of hand those of Ephesus and of Miletus, of Corinth and Athens; why did they h have this lively feeling for beauty of relief in a higher degree than any of their rivals? Engraved stones and coins only transcribe and reduce the types created by the sculptor. Now not in the West at the time of the Median wars had the statuary accomplished the advance, that opened the way to Polycletes, Myron and Phidias. That was in Ionia, at Samos, Chios and Naxos; at Argos and Sicyon, then at Athens. For the entire archaic age is cited but one sculptor, originally from Magna Grecia, Clearchos of Rhegion. Authors have not preserved to us the name of a single Sicilian sculptor. When the princes reigning at Rhegion, Gela and Syracuse desired to be represented in t the Altis of Olympia or on the sacred way of Delphi by monuments, that perpetuated the memory of the crowns that they had won in the great national games, they ordered from the goldsmiths of Ionia and the bronze-workers of Egina, tripods, chariots and statues.[1] In the little remaining from the reliefs decorating the friezes of the Sicilian temples, we have believed ourselves correct in seeing merely the aid nf a sort of provincial art, that is the continuation and reflection of the art of Peleponnessus.[2] In those conditions, it is a real surprise to the historian to have to recognize this superiority of the coinage of western Greece, andp particularlythat of the Sicilian coinage, which attains its most finished form in that of Syracuse.

Note 1.p.144. Histoire de l'Art. Vol. VIII. p.505-506.

Note 2.p.144. The same. Vol. VIII. p. 505.

However little one reflects on this, he thinks that he divines one of the reasons of this superiority. When they commenced late to strike coins, those cities of Italy and Sicily, unlike Phocea, Egina and Chalcis, Corinth and Athens, did not have the humor and habits of customers accustomed to the old types of, their first coinage. In opening their mints, they had but one thought, of obtaining from their engravers twpes as beautiful as possible. The general tendency of the work and its art char-

character were dictated by a programme thus defined; but it
remains no less difficult to render an exact account of the
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taken early by the monetary art. Syracuse was then far from
cities then the intellectual capitals of the Hellenic wor
It was neither at the source nor on the line of passage o
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those masterpieces, in which it would find the clearest and
strongest expression of the ideal, which it long commenced it
conceive. Yet there the engraver best succeeded in enclosing
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ness, that gives the same impression of grandeur as a bust
a statue. How did artists employed by Syracuse be first in
the example of those brilliant successes of the graver?

To the question so proposed can a reply be made only by
hypothesis more or less specious. Here is all that seems to
present a very marked character of probability. It is known
how passionately the illustrious tyrants of Syracuse, Gelon
and Hiero, were attached to calling and retaining at their
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them in Hellas as the leaders in lyric and dramatic poetry. In-
terested as they were in ensuring the concurrence of all the
their contemporaries, who gave or rather sold glory, they
not pay less expense for sculptors than for poets; they must
have paid royally for the works executed on their account by
Agrigentans Glaukias and Onatas; but those were not so free in
their movements as a Pindar, Simonides or Aeschylus. They were
chiefs of industry at the same time as artists. Where they
re established, they had to create vast workshops, largely
filled with plastic clay and metal ingots, where an entire pe-
ple of diligent workmen laboured to enlarge the sketches mod-
by the master, make the moulds, run melted bronze into th
to draw out and retouch the pieces that successively le
coverings of earth broken by the hammer. This numerous sta
and complex equipment, the bronze-worker could not displace
on any day to satisfy the caprice of an ambitious and prod
prince. If he desired a statue to reproduce his image, on w
he could read his name and the mention of his victory, he
had the sculptors of Delos, that when the work was once fi

character were dictated by a programme thus defined; but it r remains no less difficult to render an exact account of the c circumstances that caused and favored at Syracuse the flight taken early by the monetary art. Syracuse was then far from cities then the intellectual capitals of the Hellenic world. It was neither at the source nor on the line of passage of the great currents of poetry and of art, which in that dawning and increasing perfection on which Grecian genius proceeded toward those masterpieces, in which it would find the clearest and s strongest expression of the ideal, which it long commenced to conceive. Yet there the engraver best succeeded in enclosing in the narrow field of the coin an image, in spite of its smallness, that gives the same impression of grandeur as a bust or a statue. How did artists employed by Syracuse be first to give the example of those brilliant successes of the graver?

To the question so proposed can a reply be made only by the hypothesis more or less specious. Here is all that seems to p present a very marked character of probability. It is known h how passionately the illustrious tyrants of Syracuse, Gelon a and Hiero, were attached to calling and retaining at their court by the attraction of a showy hospitality, those that passed then in Hellas as the leaders in lyric and dramitic poetry. Interested as they were in ensuring the concurrence of all of t their contemporaries, who gave or rather sold glory, they could not pay less expense for sculptors than for poets; they must have paid royally for the works executed on their account by the Eginetans Glaukias and Onatas; but those were not so free in their movements as a Pindar, Simonides or Eschylus. They were chiefs of industry at the same time as artists. Where they were established, they had to create vast workshops, largely supplied with plastic clay and metal ingots, where an entire people of diligent workmen labored to enlarge the sketches modeled by the master, make the moulds, run melted bronze into them, to draw out and retouch the pieces that successively left the coverings of earth broken by the hammer. This numerous staff and complex equipment, the bronze-worker could not discharge on any day to satisfy the caprice of an ambitious and prodigal prince. If he desired a statue to reproduce his image, on which he could read his name and the mention of his victory, he engaged the sculptors of Egina, that when the work was once finished,

they should charge themselves with sending it to Olympia and erecting it on a pedestal there.

Thus were fabricated outside in the cities having a monopoly of the metal arts, monuments that were exposed near the most sacred temples of the mother country, and with the triumphal odes of pensioned poets, concurred in informing all the Greeks of the great things accomplished in the West by Theron, Gelon and Hiero, vanquishers of the hereditary enemy, the Phoenicians allied with the Medes; but it could not be with the coinage as with images for show. The coinage must be struck at the place according to the needs of the local circulation, under the oversight of representatives of the city, ordinary magistrates or tyrants whose usurpations had been absolved by the splendor of the services rendered. This coinage, even if not abundant, sound and beautiful in appearance, again contributed by the vogue it obtained, to enhance the prestige of the State that issued it. To obtain this result, it was first necessary to command a great quantity of the precious metal. We know the prosperity of the chief Greek cities of Sicily at that time. The victory of Himera alone placed in the power of Gelon 2000 talents of silver.[1] Material then was not lacking for coining, and to use it, there sufficed to bring to Syracuse some skilful engravers. To fashion and temper their dies, they found everywhere the necessary metals, then to prepare and strike the coins, crucibles, balances, an anvil and hammer. To design these accessories, the Sicilian princes could apply to the celebrated sculptors, of whom they were assiduous and generous patrons. It would then be the business of those princes to acclimate and settle them at Syracuse by the allurement of a very liberal salary, the artists whose talent was appreciated.

Note 1.p.148. Diodorus. XI. 26.

This explains the exceptional and precocious beautm of certain Sicilian coins, particularly the coinage of Syracuse. This beauty is not the result of a happy accident. It was sought and desired by intelligent and discreet chiefs of State. Doubtless neither the effigy nor even the name of the prince appeared on these coins; but in all that passed them from hand to hand, t they recalled the prowess and great taste of the princes that selected these types, mutely recalling the memories of the victories obtained in the national mages

victories obtained in the national games of Greece and of the defeats inflicted on Carthaginian enemies. The firmness of the execution of the images and the purity of their lines proved the value of the concurrence ensured by those enlightened protectors of letters and arts, for the fabrication of their coinage, by the city which had made them arbiters of its destinies.

Thus was formed by the initiative taken by the Dinomenide p princes, the school of Syracusan engravers. It did not disperse and fall until after that dynasty was overthrown. Under those princes, Syracuse became the most populous and most powerful city of the entire island. The admiration aroused by its coinage was a homage rendered to this preeminence, one of which it was justly proud. Thus in spite of all the storms that traversed its democratic regime, it held to not allow itself to be despoiled of that glory. Its engravers, perhaps the sons of t those employed by Gelon and Hiero, in any case their pupils, remained faithful to the types created by their predecessors; but careful to profit by the rapid progress made then by statuary in Peloponnessus and Attica, they enlarged their style. In less than a century, they came to inscribe the name of Syracuse on coins that are true marvels, works most accomplished in all points, that have ever been produced by coinage in any time and any country.

For the period that occupies us, the history of this art cannot be pushed beyond the study of Sicilian coins. It is only in the second half of the 6 th century, that the colonies planted on the Italian coasts of the Adriatic commenced to follow the examples given them by their metropolises; but the delay was still much more marked in the Greek cities of Rhodian and especially of Phocean origin, that were founded on the shores of Gaul and of Spain. A greater distance separated them from the mother country. Very scattered over a vast extent of coasts, they were situated on the borders of countries inhabited by p peoples treated as barbarians by Greeks. These cities were then the last to obtain the full benefit of a practice, that when they had finally adopted it was long years after it had entered into the customu of all the rest of the Greek world. Massalia was the most active, boldest and richest of those outside colonies; now only about 450 did it undertake to coin money. To j judge by the style of the engraving, a much earlier date cannot

[illegible]
the first issued by its mint. They bear the head of a woman
[illegible]
the initial of the name of the city.
[illegible]
time, there had been any sort of money circulating in the wes-
tern basin of the Mediterranean.
[illegible]
the [illegible] the spirit and ornament of Grecian life, the inhab-
itants of Massalia and of the other colonies on those shores
remained tributary to the centres of that Greek civilisation
with which they were proud to be connected. From thence came
arrived books and art objects, furniture, fabrics and jewels
by the intermediary of Ionian and Corinthian navigators. In
return they delivered to those sailors the wares sold to them
by Celtic and Iberian tribes, particularly the metals furnished
by the mines in the interior. They exchanged merchandise; but
[illegible] of these was paid for by means of money that all came
[illegible] from overseas brought from their native land. At Mas-
salia and in its offices, men quickly became familiar with the
types and legends of all those foreign coins. They knew th[illegible]
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the south of Gaul, the east and south of Spain, have been ex-
humed coins at many places, sometimes sporadic, sometimes [illegible]
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treasures, that about the end of the archaic age were stru[illegible]
by the cities of Ionia and Hellas, whose series did not [illegible]
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extends from the Crimea, from Etruria to Sicily, [illegible]
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not that predominates by far in this cosmopolitan coinage [illegible]
the coins of Phocaea and its associate Mitylene. The galley[illegible]
Phocaea had been the first to push to the coasts of [illegible]
an adventurous point, and to take the initiative in disput[illegible]
with the Phoenicians the benefits promised by the exploitati[illegible]

be assigned to the little pieces of silver, that appear to be the first issued by its mint. They bear the head of a woman on the face, on the reverse a crab accompanied by the letter M, the initial of the name of the city.

It is further unnecessary to imagine that before that late time, there had been any sort of money circulating in the western basin of the Mediterranian.

To succeed in protecting among them for private persons and the public the spirit and ornament of Grecian life, the inhabitants of Massalia and of the other colonies on those shores remained tributary to the centres of that Greek civilization with which they were proud to be connected. From thence they derived books and art objects, furniture, fabrics and jewels by the intermediary of Ionian and Corinthian navigators. In return they delivered to those sailors the wares sold to them by Celtic and Iberian tribes, particularly the metals furnished by the mines in the interior. They exchanged merchandize; but a part of these was paid for by means of money that all these merchants from overseas brought from their native land. At Massalia and in its offices, men quickly became familiar with the types and legends of all those foreign coins. They knew them to be of good alloy; these were sought and required everywhere. By very numerous finds, whose evidence agrees, one could form a correct idea of the part that these imported coins played during more than a century in the commerce of what, we should for the Greeks the extreme West. In the northwest of Italy, t the south of Gaul, the east and south of Spain, have been exhumed coins at many places, sometimes sporadic, sometimes grouped in great quantity, sufficient to form what numismatists term treasures, that about the end of the archaic age were struck by the cities of Ionia and Hellas, whose ships did not fear to risk themselves in these distant seas. Among the pieces thus exhumed from the ground, from Etruria to Betica, there are some from Lampsacus and Miletus, Egina and Athens, Corcyra and Velia; but what predominates by far in this cosmopolite coinage are the coins of Phocea and its associate Mitylene. The galleys of Phocea had been the first to push to the columns of Hercules an adventurous point, and to take the initiative in disputing with the Phoenicians the benefits promised by the exploitation

of an entire world, whose natural riches had not been suspected till then. It was like a curtain torn away, when in some y years after having recognized Corsica and Sardinia and then t the Balearic islands, the Phoceans established their agencies at the mouths of the great fluvial routes, like the valleys of the Rhone, Ebro and Betis. In that prodigious enlargement of the horizon, that suddenly opened such a fine career to the spirit of enterprise and speculation of the Greek merchant, t there was something analogous to what would be for Europe in the 16 th century of our era the discovery of America.[1]

Note 1.p.148. For the details of those finds and for the analysis of the elements of the monetary circulation in the western basin of the Mediterranean, see Babelon, Traite, Part II, Vol. I, the chapter entitled:- Le tresor d'Auriol et les principales trouvailles de monnaies grecques primitives en Occident. (p.1571-1618). What particularly justifies the conclusions to which the author arrived, is the catalogue that he made of the coins composing the rich deposit found near Marseilles, known under the name of the treasure of Auriol. This treasure appears to have been buried about 460 or 470.(B.C.?). At the time of the discovery it comprised 2130 silver coins, enclosed in a c clay vase covered by a flat stone.

The sailors of Phocea and of other cities taking part in the commerce of the West left in payment in the different places frequented by them, the coins that they had brought from home; but this international currency was far from sufficing for the needs of a monetary circulation, that would become gradually more active as the prosperity of these colonies increased. Men saw themselves then nearly everywhere, at Massalia and elsewhere, led to manufacture for local use pieces, that are imitations more or less careful of Greek coins of various origins, p particularly of Ionian coinage and especially of the coins of Phocea and of Mitylene. "These imitations are sometimes irregularly standardized. Sometimes their types very skilfully approach the original prototype, and sometimes they may vary from it so far that the initial image is almost unrecognizable. There are even some formless lumps without types, which remain the retarded evidences of the period during which the metals were exchanged in the state of ingots." [1]

Note 1.p.149. Babelon. Traite. Part II. Vol. I,p.1575.

All these pieces are without legends and with a sunken square on the reverse. Nowhere is the trace of a legend, that by giving the coin an official character would guaranty its value. The magistrate has not intervened in that fabrication. Private industry charged itself with it, and for the weights as for t the engraving of the coins, it is satisfied to be nearly correct. It could not be otherwise; in truth this was only a sort of fiduciary money, only serving to regulate small purchases in retail commerce, or to make change in great payments. In all that coinage was not one stater; even the drachma is very rare. The blanks of these little pieces is generally of very irregular shape, so that frequently in striking, the impression of the die is not entirely aapparent.

Not only the Greeks of the coast used between them this counterfeit money. In Gaul and Spain have been found deposits in the interiors of the countries. The natives that lived near t the Hellenic agencies had assumed a taste for money. They freely accepted these in payment for raw products supplied to the cities of the coast, and it seems that then frequently stored them as articles of value. This gives reason to consider the appearance of most of these little pieces exhumed in the countries served by this industry. They seem quite new; they are almost the choice from the die. On the contrary, when one finds on those coasts some coins of Ionia or of Hellas, those are v very worn. It is divined that they have passed through many hands before coming to end their career in these distant regions.

7. General Character of archaic Grecian Coinage.

In the preceding pages the reader has seen a selection of s specimens of the products of the art of coining, for the period comprised between the beginnings of that art and the years that closely follow the result of the Median wars. Not from that p period date the masterpieces of the graver, those admired b: modern medallists, and whose mastery they despair of excelling. These masterworks originated only later in the course of the 5 th and 4 th centuries, when sculptures by Polycletes, Myron and Phidias, Praxiteles, Scopas and Lysippus, shall furnish t the engraver with models, that will teach him to present various interpretations of the living form, but all equally free and faithful. Yet by the types surveyed one can henceforth form

a just loss of the course that this art pursued in Greece among [illegible] out the efforts that these engravers of all these cities [illegible] of Hellas and the islands, especially with the coins of Magna Graecia and of Sicily, one already divines how [illegible]. These and their successive rivals knew how to give nobility and [illegible] of a didrachma or of a stater.

[illegible] used for monetary circulation did not vary in themes and [illegible] ance from those found in the works of the sculpture of the 7 th century. Place them near each other, intaglios of that same [illegible] the first Lydian and Ionian coins; you will be struck by any [illegible] or fictitious animals, the latter offer images of composite [illegible] forms taken from various types of organic life. Perhaps the [illegible] all cases for the two trades is only one of the same repertory. The service that the banker or the State required from the [illegible] which it stamped, was the same as the private man expected from the engraver to furnish him with a seal. All that either desired is, that by the virtue of the mark placed on the material, the metal or the [illegible] to them, either the credit of the merchant, that of the city that [illegible]. What first of all preoccupies the artisan [illegible] intaglios or coin, the he is charged to execute, a figure [illegible] by its singularity distinguishes the seal of his patron from the seals of his fellow citizens, or the coinage of one city from that of another. Thus is explained the extreme diversity [illegible] everywhere is felt an intense desire experienced by the engraver to diversify the work to which he applies himself for the [illegible] not to expose the public for which he works to confuse similar

a just idea of the course that this art pursued in Greece among the people that had been its true creator. He takes into account the efforts that these engravers of all these dies imposed on themselves for casting a ray of beauty on those ingots, at first merely a convenient medium of exchange. With some pieces of Hellas and the islands, especially with the coins of Magna Grecia and of Sicily, one already divines how Evenetos, Kimon and their anonymous rivals knew how to give nobility and grace to the images, that they had to enclose within the narrow field of a didrachma or of a stater.

At the beginning the impression received by the ingots intended for monetary circulation did not vary in themes and appearance from those found in the works of the sculpture of the 7 th century. Place them near each other, intaglios of that epoch chosen by chance in the cases of the Cabinet of Antiques, and the first Lydian and Ionian coins; you will be struck by the resemblance. What dominates in both groups are figures of real or factitious animals, the latter being images of composite b beings, wherein caprice of the workmen ingeniously combines f forms taken from various types of organic life. Perhaps the s same hands sunk here in fine stones and there in metal; but in all cases for the two trades is only one of the same repertory. The service that the banker or the State required from the ingot which it stamped, was the same as the private man expected from the steatite or cornelian that furnished him with a seal. All that either desired is, that by the virtue of the mark placed on the material, the metal or the gem represents to them, either the credit of the merchant, that of the city that guaranteed the value of the coin, or the act of will by which a certain person promises a third person. In these conditions, what first of all preoccupies the artisan is to adopt for the intaglios or coin, that he is charged to execute, a figure that by its singularity distinguishes the seal of his patron from the seals of his fellow citizens, or the coinage of one city from that of another. Thus is explained the extreme diversity and the singularity of this sculpture and of this coinage. Everywhere is felt an intense desire experienced by the engraver to diversify the work to which he applies himself for the time, not to expose the public for which he works to confuse similar

objects, seals or coins, by reason of a too accurate [illegible]

This result is pursued at first by means of tatent [illegible], by bizarre combinations of heterogeneous forms, but the [illegible] will obtain it later at less cost, when his hand becomes [illegible] flexible, and he shall have been at the school of grand sc[illegible]-ure. Then will poetry and religion usually suggest to him the choice of his types, and at least until the bottom of the [illegible] of Alexander, he will continue to accord a very marked [illegible]-ence to motives of that kind. For each one that he engraves, [illegible] form, that by the choice and arrangement of the traits borrow-ed from reality, worthily translates one of the ideas that Gr-[illegible] the forces of nature, and the laws by which are regulated the phenomena of the physical and the moral worlds. Is not this obligation for the imagination of the artist a stimulant very [illegible] ra century B.C., and that it will retain in our modern societ-ies, of making a portrait the principal type of their coinage. In the rendering of these effigies of emperors and kings, of [illegible]-ity, among the ancients as in our days; but the models placed before him will rarely be beautiful, and during 50 and someti-[illegible]-ed from one issue to another, which he must reproduce on the [illegible]-tion? In the accomplishment of his task, even where he employs [illegible] same princely head will never have the attractive variety of the coinages of free Greece. Before the establishment of the vast kingdoms issuing from the dismemberment of the Macedonian empire, each city had its particular types. These were trans-mitted from one generation to another; but the engraver set him-self to perfect these types, or to diversify them by the in-troduction of some new detail, to make more majestic or more [illegible] recent event. By the effect of the very special conditions in which was developed the life of the Greek race, the types of

objects, seals or coins, by reason of a too accurate resemblance.

This result is pursued at first by means of patent endeavor, by bizarre combinations of heterogenous forms, but the engraver will obtain it later at less cost, when his hand becomes more flexible, and he shall have been at the school of grand sculpture. Then will poetry and religion usually suggest to him the choice of his types, and at least until the morrow of the death of Alexander, he will continue to accord a very marked preference to motives of that kind. For each die that he engraves, the artist is held to make an effort of invention, to find a form, that by the choice and arrangement of the traits borrowed from reality, worthily translates one of the ideas that Greek thought forms of those supreme powers in which it personifies the forces of nature, and the laws by which are regulated the phenomena of the physical and the moral worlds. Is not this obligation for the imagination of the artist a stimulant very different in action from what custom has assumed, since the 3 rd century B.C., and that it will retain in our modern societies, of making a portrait the principal type of their coinage? In the rendering of these effigies of emperors and kings, of princes little and great, he could place much skill and fidelity, among the ancients as in our days; but the models placed before him will rarely be beautiful, and during 30 and sometimes for 50 years, there will be the same traits, scarcely changed from one issue to another, which he must reproduce on the surface of his coinage. In the copies that he presents, will he not risk allowing the facility and a rather routine execution? In the accomplishment of his task, even where he employs most conscience and talent, this monotonous repetition of the same princely head will never have the attractive variety of the coinages of free Greece. Before the establishment of the vast kingdoms issuing from the desmemberment of the Macedonian empire, each city had its particular types. These were transmitted from one generation to another; but the engraver applied himself to perfect these types, or to diversify them by the introduction of some new detail, to make more majestic or more charming the image of the deity venerated by his people, to r represent on one side of the coin a motive commemmorating a r recent event. By the effect of the very special conditions in which was developed the life of the Greek race, the types of

[illegible]
[illegible]
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that among our medallists we find only a few pieces of the same city, that appear to have been struck with the same die. By this means the study of this numismatics has for the historian [illegible]

It is not alone the character of their themes which confers on these Greek coins the advantage of being true works of art, more generally than ours, and to a higher degree they owe this merit in a certain measure to their mode of execution. That do not permit attaining in form and the striking of coins the precision guaranteed by the work of the machines today at the command of the industry of coinage; but for the imperfection of the mechanical procedure was a compensation. If the methods then in use were rudimentary and so remained during long centuries, they made a more direct appeal to the initiative of the workmen, much greater than those now employed in our mints. In the operations with which he was charged, this workman put intelligence and taste impossible to the workmen, that with us control the hydraulic presses from which the coins escape by thousands in a few hours.

[illegible] conceive than that of former times have led us to give to the coins circulating in our societies a form sensibly differing from that affected by antique coins. "Before all in modern coinage, men seek that the blank receiving the impression must have a perfect regularity, be equally flattened on all parts [illegible]. This is indeed a great convenience for keeping silver in a strong box, and a serious guarantee against theft, for a mere glance suffices to assure that a pile of coins has not been reduced [illegible] to the balance to verify, that nothing has been taken from a lot composed of coins of irregular form enclosed in a [illegible].
[illegible] although it may be very unfavorable to art, by compelling the engraver to give to the types a too slight relief, that must be no obstacle to piling the coins. 1

the coinage have been in space almost infinite in number, and in time the same in which they seem to have been best fixed by tradition, they have always admitted variations in such number, that among our medallists we find only a few pieces of the same city, that appear to have been struck with the same die. By t this means the study of this numismatics has for the historian of art a more vivid interest than that of the States of Christian Europe.

It is not alone the character of their themes which confers on these Greek coins the advantage of being true works of art, more generally than ours, and to a higher degree they owe this merit in a certain measure to their mode of execution. That did not permit attaining in form and the striking of coins the precision guaranteed by the work of the machines today at the command of the industry of coinage; but for the imperfection of the mechanical procedure was a compensation. If the methods t then in use were rudimentary and so remained during long centuries, they made a more direct appeal to the initiative of the workman, much greater than those now employed in our mints. In the operations with which he was charged, this workman put intelligence and taste impossible to the workmen, that with us control the hydraulic presses from which the coins escape in thousands in a few hours.

The requirements of a monetary circulation quite otherwise active than that of former times have led us to give to the coins circulating in our societies a form sensibly differing from that affected by antique coins. "Before all in modern coinage, men seek that the blank receiving the impression must have a perfect regularity, be equally flattened on all parts of both sides, so that the coins may be combined in piles. This is indeed a great convenience for keeping silver in a strong box, and a serious guarantee against theft, for a mere glance suffices to ensure that a pile of coins has not been reduced in height, while it is necessary to count each piece or resort to the balance to verify, that nothing has been taken from a lot composed of coins of irregular form enclosed in a sack. Thus there were decisive reasons for adopting this form, although it may be very unfavorable to art, by compelling the engraver to give to the types a too slight relief, that must make no obstacle to piling the coins. [1]

Note 1.p.153. Fr. Lenormant. La monnaie dans l'antiquite. Vol. I, p.280-283.

"For the rest, these slight reliefs alone suit a coin in the form of a flat disk, and nothing is more disagreeable in effect, than the medals struck today to perpetuate the memory of important events, with their types projecting strongly from an absolutely flat surface. Quite otherwise is the appearance of antique coins of great dimensions, for example of the decadrachmas of Syracuse with their beautiful lenticular shape, swelled at the centre and thinned at the edges, in which is recognized so well the marvellous feeling of Greek artists for fitness. The projection of the coin increases the value of the central part of the type, which the engraver conceived to draw attention to that point, while the field gradually recedes toward the circumference, and thus has not the importance as on our medals of today, that crush the type. Particularly in the heads that decorate the principal side of the coins does the superiority show in a striking manner. A variety in planes is gained there, a firmness and power in the modeling, a refinement in the contours, receding and arrested at the same time as nature gives t them, which cannot be attained with the modern system. One feels air and life circulate. The type of the coinage thus equals the most beautiful effects of sculpture, while the effigies of our own coinage are flat and without relief. Those of commemmorative medals are raised more and seem unskilfully struck on a blank of uniform thickness that supports them."

"Here intervenes the difference in the processes of fabrication. Antique coinage was struck by the hammer. Modern coins a and medals are struck by mechanical means of great power. The use of these machines has produced an important economy and a considerable increase of rapidity in the production; but art has lost, as it nearly always loses in the use of machines. The hammes strikes less strongly than the balance pole or the hydraulic ram, does not crush the blank in the same manner, a and thus permits avoiding the hardness and dryness of contours, defects noted on all our coins, but which were unknown to the numismatics of antiquity. Handled by skilful workmen, the hammer was in instrument obedient to the will as the chisel of t the sculptor. The coiner could regulate the force of his blow as he intended, render it more or less violent, as required by

[illegible] [illegible] On the contrary, the effect of a machine cannot be regulated in the same fashion. It does not know those delicate shades that have so much importance in the execution of works of art. It strikes with stiffness, with the uniform and brutal regularity of an automatic force."

the nature of the die by which he had to produce the impression. It was easy for him to arrange so as to make the principal vigor of the stroke bear unequally on the different points of the surface of the coin, in order to give more projection and more value to certain parts of the type. On the contrary, the effect of a machine cannot be regulated in the same fashion. It does not know those delicate shades that have so much importance in the execution of works of art. It strikes with violence, with the uniform and brutal regularity of an unconscious force."

Chapter XVII. Black Pottery and Monochrome Vases with Reliefs.

Before commencing the study of Grecian painting and of the painted vases on which we shall seek its reflection, it is proper to make known by some examples a pottery of a very special kind, the black pottery and monochrome red pottery, which seeks the elements of its decoration in the projecting designs, which the workman has distributed over the surfaces exposed to view. The processes by which this decoration is obtained approach those employed by the engraver on hard stone or metal and sculpture. It is sculpture again that elevates this industry. The images that it applies on clay are slight reliefs executed either by the modeling tool, by the use of the roller or by p pressing in a mould.

Those products of this kind which particularly attract the attention of the visitors of our museums are of this pottery of a lustrous black, that among archaeologists it is customary to designate by the name of "bucchero nero," a name given to it by Italian antiquaries.

These vases are of very different corms and sometimes of very great height, and abound in all collections in which have been gathered the equipment of the tombs of Etruria. Men were long inclined to recognize in them the products of an industry entirely local, whose invention and monopoly must be carried to the account of Tuscan workshops; but in examining it more closely, one mus correct that assertion in a certain measure. In this country of long feasts and good cheer, the ceramist w was bound to furnish his patrons with a pottery for display; but to fill and decorate the fields, he did not have the advantage like the Greek potter, of using paintings whose themes w were borrowed from the enexhaustible repertory of a mythology that the imagination of the poets had marvellously diversified. Then what he attempted on the painted vase was hardly more than to copy or imitate with more or less skill the Ionian, Corinthian or Attic vases, those of the Lucumans, lords of Tarquinii and Clusium, Agylla and Volsinii, imported into Etruria to ornament their houses and then their tombs, just as three or four centuries ago they introduced into Europe the porcelain of China and of Japan. Those counterfeits could not be very highly

prized by connoisseurs. To present to the

prized by connoisseurs. To present to them a pottery, that with a national character its charm and originality, it was necessary in the native workshops to seek something else. What they undertook was to arrive at reproducing by means of certain fashions of treating the clay, the color and appearance of vases of metal, whose first models had been offered by the contributions of Ionian industry, but which the hammer and chisel had very soon learned to execute with rare mastery. They did not content themselves by copying Their contour and curve. Due to the beautiful polish received by the clay, they could make it as shining as bronze, and even enliven these sombre tones by a discreet application of leaves of gold and silver. The effect thus obtained was found nearly equal to that secured in the workshop of the metal-worker, when bronze was inlaid by the precious metals. The illusion was carried even to deceive the eye. What completed the resemblance were ornamental motives sunken or in relief, and applied figures in high or middle relief. In this manner the piece found itself provided with a decoration which imitated that, which the bronze-worker and goldsmith required from the incisions of the graver or the boldness of repoussee work.

In Greece, where the painted vase dates from prehistoric times, the industry of black pottery could not have the same fortune as in Etruria; its technics could not end in the same complications and the same refinements. Why should the Greek workman give himself so much trouble to cause clay to play the part of metal, when he had found means of giving to that clay a decoration more appropriate to the nature of that material, one that comprised a very different kind of ornamentation, than t that of those overlays of metal in which the Etrurian workmen displayed such laborious ingenuity?

If for this reason the black pottery, a servile imitation of metal, had no future in Greece, one would not be justified in believing that the Greek potter was ignorant of that sort of vessel. Vases or fragments of those vases made of a paste of dark color have been found at a great distance from each other in many parts of the Hellenic world. At Naucratis, Rhodes and Samos, i.e., in Ionian countries have they shown themselves most numerous;[1] but they have also been collected at Selinonte

in Sicily, on Cyprus and on Crete, then on the island of Lesbos [illegible]
n.[2] They have been encountered on the site of Olpia, the distant [illegible] ens has yielded some places; likewise Beotia.[3]

Note 1.p.157. Salzmann has found and drawn a number of these [illegible] *27, 28). For Samos, see Böhlau. Aus Ionischen und Italischen Nekropolen. p.115-121; Pl. IX, 1-8.*

[illegible]

[illegible] *Vol. II, p.324-325) refers to various mentions of black vases discovered in Grecian lands, made in archaeological literature. Olpia does not appear on his list; Löschk cites it (Jahrb.18*[illegible]

Since the first finds of this sort, it has been asked if all this pottery was not of Etruscan fabrication, and if it had not been scattered by maritime commerce over the coasts of the eastern basin of the Mediterranean. In exchange for the painted vases sold by Miletus and Corinth, Chalcis and Athens, Etruria might have furnished its black pottery. Reflection has led men to discard this hypothesis. Doubtless it did not appear impos- [illegible] pottery, that was as we should say, a specialty of Tuscan industry; but if they had that fancy, it seems that they would [illegible] of those vases, best showing the effects that the Etruscan workmen had obtained from that technique. Now this is represented outside Etruria, in Greece proper as in its Asian and African [illegible] ents of the same. This singular fact only has one explanation: [illegible] only made of it an ordinary vessel, for which he had no [illegible] ie of invention. At the Louvre (hall A) are little cups of [illegible]

Only at Naucratis in Egypt have the excavations yielded fragments of black pottery, that are the remains of vases of quit

in Sicily, on Cyprus and on Crete, then on the island of Lesbos and on the neighboring continent at Neandria in Eolis, in the cemetery of Iortan near Pergamon, in various places of the Troad.[2] They have been gathered on the site of Olpia, the distant Miletan colony at the back of the Euxine. The Acropolis of Athens has yielded some pieces; likewise Beotia.[3]

Note 1.p.157. Salzmann has found and drawn a number of these fragments of vases with reliefs (Necropole de Camiros, Pls. 26, 27, 28). For Samos, see Böhlau. Aus Ionischen und Italischen Nekropolen. p.11?-121; Pl. IX, 1-8.

Note 2.p.157. On the ceramic fragments exhumed at Iortan, see Comp.Rend. de l"Academie. 1900. p.269.

Note 3.p.157.Pottier (Catalogue du Louvre, etc. Vol.I,p.1.2-153; Vol. II, p.324-325) refers to various mentions of black vases discovered in Grecian lands, made in archaeological literature. Olbia does not appear on his list; Löschk cites it (Jahrb.189?; Arch. Anzeiger p. 18).

Since the first finds of this sort, it has been asked if all this pottery was not of Etruscan fabrication, and if it had not been scattered by maritime commerce over the coasts of the eastern basin of the Mediterranean. In exchange for the painted v vases sold by Miletus and Corinth, Chalcis and Athens, Etruria might have furnished its black pottery. Reflection has led men to discard this hypothesis. Doubtless it did not appear impossible that the Ionians, who frequented Etruscan markets, may have sometimes brought specimens of that black and lustrous p pottern, that was as we should say, a specialty of Tuscan industry; but if they had that fancy, it seems that they would rather prefer to keep the exhibit most beautiful and largest of those vases, best showing the effects that the Etruscan workman had obtained from that technics. Now this is represented outside Etruria, in Greece proper as in its Asian and African colonies, only by vases in very small dimensions or by fragments of the same. This singular fact only has one explanation: the Greek ceramist knew how to prepare this dark paste; but he only made of it an ordinary vessel, for which he had no trouble of invention. At the Louvre (hall A) are little cups of this kind, that are believed to have come from Rhodes.

Only at Naucratis in Egypt have the excavations yielded fragments of black pottery, that are the remains of vases of quite

large height, decorated tripods, goblets with conical bases a and cups with flat bottoms. On several of these fragments are dedications engraved with the point, which attest that these vases were consecrated to Aphrodite by Lesbians originally from Mitylene or some other city of the island.[1] In these inscriptions have been recognized the alphabet and forms of dialect in use at Lesbos in the time of Alceus and Sappho. Is is probable that givers all intended by a singular accord to offer to the goddess, not the products of their national industry, but those of a foreign industry, products in current commerce, no more at Naucratis than at Lesbos? Here is also a reason still more convincing for rejecting the idea that the black pottery of oriental Greece could be of Italian origin. At Samos was found the best preserved specimens, cups, cups with feet, pitchers and vials (Fig. 79). Some light touches of white show on the gloomy surface, whose black lustre does not fail in brilliancy; but in the fracture and in the interior of the cup, the clay has neither the hardness nor the frank tone of the Tuscan bucchero. It is soft and friable; a fragment of one of these vases being plunged into water, it disintegrates and melts like sugar there. This clay is not black, but of a chocolate color.[2] It is felt that there has not been applied here the care in preparing and burning this clay as in Etruria. Thus is confirmed the idea formed by us of the little importance that the Greek potter always attributed to this fabrication.

Note 1.p.158. F. Petrie and E. Gardner. Naucratis. Part I, p. 419; Part II, p.47,48,65-66; Pl.XXI,Nos. 786-793.

Note 2.p.158. Böhlau. Aus Ionischen etc. f. 119-121.

Black pottery having thus played only a very secondary part in the evolution of ceramics in Greece, there is really no place here to discuss the very much controverted question of the procedure by which the workman came to color the clay thus. T On one point is agreement, the nature of the coloring material. The black is not due to the use of a clay that had in the pit this special color. According to the results of several analyses, it is by the introduction of a quantity of carbon into t the paste, that represents 2 to 3 per cent of the total mass. This carbon is intimately mixed with the clay and has changed its color. But how was thes mixture made? On this point, opinions differ. Most archaeologists that have occupied themselves

with this pottery explain the coloring by prolonged smoking, that caused the carbon to penetrate as an impalpable powder into the pores of the clay. As this smoking was made in the open air and in unskilful fashion, or in a closed vase and by wise methods, it gave imperfect results, as in the very ancient vases of a coarse fabrication that the Italians term impasto, or uniform and excellent results.

In this case a final operation gave the vase the metallic tone aimed at by the workman. When this vase left the oven, it was covered by a light coating of wax or resin to give it brilliancy and to make it impermeable; if was then polished with great care and the piece was finished.

Other experts in Etruscan things do not admit that smoking could alone produce these effects. They believe that on the outer and inner surfaces of the vase while still raw was a coating of lampblack and carbon, which firing incorporated wiwith the clay. However this may be, the success of the firing depended on the skill with which was managed the fire. When it was pushed too rapidly or the heat was carried too high, t the carbon deposit was consumed in place, the clay then retained its red tone, imprinted on it by the flame of the oven in ordinary conditions.[1]

Note 1.p.160. On this process and the defferent solutions p proposed for making black vases, see Pottier. Catalogue etc. Vol. II,p.293-294, 315; Schliemann. Ilios. Egger's trans.p.270-2.

In whatever manner one desires to understand the mode of fabrication, it was certainly the same in the East and in the West. From one group of workshops to another, procedures must not h have sensibly differed; but what can be asked is, where and by whom were they invented? The Etruscans perfected them and made a very different use of them than the potters elsewhere; but did they create this technics or have they received its elements from outside? There is a question to which one cannot reply with full certainty. When it is proved that the impasto with its clay badly smoked and merely browned by the fire, preceded the bucchero of the Etruscan tomb, one would be tempted to believe that the Tuscan workman was able by his own means and experiments to impose his methods; but on the other hand, Etruscan civilization after the 7 th century bears the traces of so

many borrowings, at first made from Phoenicia and soon afterward from that Greece, that one is inclined to assume as the origin of this industry. As a rude sketch of a type that never succeeded in freeing itself, the impasto would be Italian; but for the clay as the bucchero to learn to imitate metal, it would be necessary that foreign models should come to stimulate the native workman, or that perhaps even the secrets of the t trade were taught to him by some one of those Greek potters, that according to tradition went to establish themselves in more than one Etruscan city. Men appear to have known how to make this black pottern in the Orient much before the time when the bucchero industry flourished in the West. There is a certain vase of this kind, collected in Egypt, to which from the objects found with it, one believes it right to attribute a very high antiquity; the year 2000 has been mentioned.[2] Without ascending to that, the bucchero of Cyprus and of Rhodes s seems in general to be earlier than the 6 th century; at least this is indicated by the age assigned to the cemeteries from which it came.[1]

Note 2.p.160. F.Petrie(Jour.Hell.Studies. 1890.p.276;Pl.XIV,9).

Note 1.p.161. These vases possessed by the Louvre and British Museum came from the cemetery of Camisos; now to the 7 th century are referred most of the tombs excavated by Salzmann (Potter. Catalogue, etc. I. p. 149).

What again confirms the hypothesis of the importation of the procedure into Etruria is the fact, that recent discoveries h have placed beyond doubt. At the Louvre and in other museums are seen large plates and great jars or vases, that came from Caere and other Etruscan cities, which present a very peculiar character. Some have only smooth surfaces; but where there is a decoration it projects from a surface 0.79 to 1.18 ins. thick. Sometimes brown, their clay is usually of a reddish tone. On a number of pieces, this ornament only comprises geometric designs, chevrons, eggs, triangles, etc.; but elsewhere the figure plays a part in the ornamentation. This was executed by means of a cylinder on which had been engraved in intaglio the images that it was desired to have in relief on the jar. Applying pressure, the cylinder was rolled on the clay while still damp. This entered the hollows of the mould and made an impression later hardened by the fire of the oven. By being rolled thus

in contact with the paste, the cylinder repeated the same motive indefinitely. Whether this represented men, real or factitious animals, these kinds of bands extended around the vase near its upper edge. Sometimes the artisan employed a slightly different method. He forced his plastic clay into moulds, from whimh he took as many impressions as necessary, of a head or of a personage, which he then utilized as overlays. He cemented these overlays with a little slip after each other on the field that he wished to decorate. In this case the images are farther apart with less regular intervals between them.

The Etruscans were at first regarded as the inventors of this technics; but in these later times, vases of this kind are often found in fragments in very great numbers at various points of the Grecian world, so that one believes himself compelled to renounce that idea.[2]

Note 2.p.161. Pottier. Les vases archaiques a reliefs dans les pays grecs.(Bull. Corr. Hell. 1890. p.491-509. Also vases a reliefs provenant de Grece (Monuments Grecs, etc. 1885-1888. p.43-59.Pl.VIII).

This very massive ordinary pottery was destined for domestic use, and did not have the pleasing appearance of the sort of originality, which could have explained in a certain measure the exportation of the bucchero nero. The excavations of Hissarlik and of Cnossos have proved that from the prehistoric age, the people settled around the Egean sea knew how to fabricate for preserving grain and liquids, those great jars of clay burned in the kiln, which they sometimes attempted to give a rudimentary ornamentation.[1] They placed on them circular bands or chevrons, rosettes, leafy branches. This mode of decoration, the Etruscans had borrowed from the jars filled with oil or wine brought to them by Hellenic commerce.

Note 1.p.162. Histoire de l'Art. Vol. VI,p.211, 252-253, 461; Figs. 57, 173.

Nearly twenty years since, there was already a long list of fragments of vases with reliefs, that had been collected in S Sicily and east of the Adriatic.[2] Not worth while to extend it for the little now undertaken in that research. We shall only have the embarrassment of choice to present here some specimens of this ornamentation, selected from the most interesting of their themes.

Note 1.p.182. Histoire de l'Art. Vol. II,p.211,252-253,461;Pl.
XV.173.

[illegible]
appendix to Article on Monuments de l'association des etudes
grecques.

Here is first a fragment from the excavations of the Acrop-
[illegible]
recognized that it came from a vase analogous to those of Camir.
The subject represented here is one of those very often found
[illegible]
[illegible]
or, protected by a large round shield, helmet on head and spear
in hand, a warrior springs on a chariot to which is harnessed
[illegible]
[illegible]
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ciion. The relief is weak and very flat. In placing the mould,
the artisan has not thought to arrange an interval between the
[illegible]
roller. The head of the first horse is thus found to nearly t
touch the helmet of the warrior preceding him in this march.

On a fragment of a vase of the same type purchased in Laconi,
[illegible]
complex.[1] Two nude warriors are in combat with crossed spears.
One has the round shield and the other the shield with two side
[illegible]
and then at each side is a person taking part in the struggle.
[illegible]
ently appears on Corinthian and Attic vases of the 6 th century.

Note 1.p.163. Le Bas. Voyage archaeologique. Plates and text-
[illegible]
[illegible]

Of the two processes that we have examined, the second was
applied in the decoration of a vase of red clay, a fragment
which was found in Boeotia as assure, and it is now in the Lou-
vre.(Fig. 82).[1] Of what formed the ornamentation, there remains
[illegible]
en. With the arm raised and the palm of the hand turned out,
it is divined that their attitude was that of adoration and
prayer.

Note 1.p.162. Histoire de l'Art. Vol. II,p.211,252-253,461;Figs. 57,173.

Note 2.p.1_2. The most complete is that given by Potties as appendix to Article on Monuments de l'association des etudes grecques.

Here is first a fragment from the exeavations of the Acropolis of Athens (Fig. 80). By its curvature and thickness, it is recognized that it came from a vase analogous to those of Caere. The subject represented here is one of those very often found on the painted vases of the 6 th century in episodes, like the departure of a hero for the combat; of an Amphiarus or a Hector. protected by a large round shield, helmet on head and spear in hand, a warrior springs on a chariot to which is harnessed two horses. On this chariot stands the driver with reins in hand. He is clothed in a long tunic that covers the same person in the celebrated bronze of Delphi. Over the chariot is a scorpion. The relief is weak and very flat. In placing his mould, the artisan has not thought to arrange an interval between the impressions,that succeed on the clay from the rotation of the roller. The head of the first horse is thus found to nearly t touch the helmet of the warrior preceding him in this march.

On a fragment of a vase of the same type purchased in Laconia, the image was doubtless obtained in the same manner and is more complex.[1] Two nude warriors are in combat with crossed spears. One has the round shield and the other the shield with two side notches. Beneath their feet is the corpse of a combatant. Behind them at each side is a person taking part in the struggle. That on the left holds a bow. This is a group that very frequently appeaes on Corinthian and Attic vases of the 6 th century.

Note 1.p.163. Le Bas. Voyage archaeologique. Plates and topography, sculpture and architecture published and commented on by S. Reinach. 1888. pp.99 + 105 pls.

of the two processes that we have examined, the second was applied in the decoration of a vase of red clay, a fragmant of which was found in Beotia as assure, and it is now in the Louvre.(Fig. 82).[1] Of what formed the ornamentation, there remains on the piece in question only the heads anf torsos of two women. With the arm raised and the palm of the hand turned away, it is divined that their attitude was that of adoration and p prayer.

to ornament his work, the potter had made choice of a motive that we have already found on more than one archaic monument;[1] he had represented a chorus, i.e., a file of women clad in festal garments and marching with cadenced steps, whose rhythm w was usually marked by the sound of the flute, coming to render homage at a tomb or an altar. The movement is the same for both women. They formed a part of an entirety in which were repeated the same poses and the same ritual gestures; but between the figures,in the proportions as in the details to the abjustment and modeling1 there are slight differences which suffice to d demonstrate that we do not have under our eyes impressions from the same mould. These differences are not such that could be explained as retouches with the tool. The right figure has a longer face than the left, the mouth is better drawn and the chin is stronger. The two pendant tresses of her hair are arranged on each side of her ear, and not thrown back as for her companion. The drapery covering her chest extends much higher. On only one of the two images, that on the left, are seen on the uhoulder concentric circles in which are believed to be recognized the heads of brooches serving there to fasten the fabric. Each of the figures has been treated separately. This was a little relief that before burning,the potter added to t the body of the vase. Thus executed separately, the dancers do not hold hands, as they frequently do in images of the chorus left to us by sculpture and painting.

Note 1.p.164. Pottier. Monuments grecs. 1885-1888, p.44-48.

Note 1.p.165. Histoire de l'Art. Vol.III, Figs 399,48?; VII, Figs. 59,96; VIII, Figs. 145, 153.

The clothing is nothing but the primitive Dorian, most simple of all. It consists of a peplos made of a great rectangular p piece of woolen, whose upper part is turned down over the chest and back to form what the Greeks called the apoptygma, while the rest of the material is held to the waist by a wide girdle and extends close to the body. The little rounds perceived above the brow must represent either the projecting buttons of a sort of diadem, or round pieces of gold combined with the hair, similar to those that the Mycenaeans of both sexes sewed on their garments.

All concurs here in giving the impression of a very remote

date. These are the fashions of rendering the hair by little opposed lines in herring-bone form; the body seen in full with the face presented in profile; an enormous eye in this profile drawn in front view; in the angular lines of the strong and ungraceful projection of the nose. There has been mentioned the 6 th century in the time of Pisistratus. I should prefer to believe in the last years of the 7 th century.

Particularly in Beotia did the ceramists appear to have a m marked taste for ornament in reliefs. They applied this ornament on great amphoras, many fragments of which are scattered in the museums of Europe, but of which it has been posseble to restore some nearly complete examples. The clay is red in the fracture and was carelessly prepared; it contains many little pebbles; but these vases with their partly perforated vertical handles no less have a very beautiful curvature in spite of s some heaviness (Fig. 83). The reliefs of very archaic character were executed with care. Those amphoras must be objects of a certain value.[1]

Note 1.p.166. Da Ridder. Amphoras a reliefs. (B.C.H. 1898. p.439-471, 497-519; Pls. IV-VI bis). Also in Zelanges Perrot. p.296-301. Vases archaiques a reliefs. The fragments described belong to the Cabinet des Antiques of the National Library. Their source is unknown; but from the nature of the clay and the character of the technics, they appear to De Ridder to be of Beotian origin.

To appreciate the objects of this fabrication, there are particularly two nearly entire amphoras, possessed by the museums of Athens and of the Louvre. Both have a striking resemblance, both in the entire plan of the ornamentation and in the execution of the images. These ornament only one face of the vase, a peculiarity explained by the destination itself of the vase. All these amphoras came from tombs. They were show vases placed over the tombs. There they played the part taken in Attic cemeteries by the colossal vases of the Dipylon.[1] Erected on the funereal mound or cippus, they received decoration only on that side presented to the eyes of the visitor to the necropolis, when he followed the road through it on leaving the city.

Note 1.p.167. Histoire de l'Art. Vol.VII,p.55-60; Figs. 4-8, 48, 49, 56, 60, 61.

On both vases, on the side of the shoulder are two bands on which is a series of passing animals between triple or quadruple fillets. These are deer belonging to different species; b but they all have the same fine and slender proportions. On the neck and within a frame added to the fillets on both sides and beneath the lip are palm leaves and verticals, then a scene forming the principal motive of the decoration. On the vase of the museum of Athens, standing between two lions is a woman c clothed in a wide robe in bell form without a girdle.[2] Two women of lesser height are clad in the same fashion and appear to support the raised arms of the large figure. She has her hands opened with palms in front in the attitude of adoration. In this personage can only be recognized a goddess. It is very probably Demeter, the great Beotian divinity. The wild beasts stand beside her and her gesture seems to charm and soothe them. The branches extending from her temples allude to her empire over the plant world. She is the mistress of both plants and animals. Her power extends over all nature. On the vase of the Louvre is Perseus crowned with the petasus and armed with the sword, who goes to slay the Gorgon (Fig. 84). There will be noted in this group the singular form given by the potter to the victim of the hero. The myth is well known. From the b blood of the Gorgon is born the winged courser Pegasus. Now to announce the metamorphosis that is to be produced, the modeler has created here a monster like the centaur. He has joined to the woman as a train the hinder parts of a horse. I do not know a relief or ceramic painting in which the subject was understood in that manner.

Note 1.p.167. We have already found these robes in bell form in the rude figurines of terra cotta, that also appeared to come from Beotia, and which date from the 9 th and 8 th, or at latest the 7 th century.(Histoire de l"Art. Vol. VII,Figs.28-31).

Two other vases from the same source are much less well preserved. On one, the field of the neck is occupied by the image of a procession, at the head of which marches a woman holding a sceptre, followed by four other women carrying a coffer.(Fig. 85). On the other vase, there is on the same place a combat b between two warriors, perhaps the combat of Hercules and Kyknos. The lower zones of the body and of the shoulder here show files

[illegible]

backward, that I have seen nowhere else (fig. 60). Even the motive of the mounted archer is but very rarely found on the monuments of Grecian art.

When these archers have been studied and described, one [illegible] first sight, it might be believed that they resemble each other, [illegible] in the damp clay by means of moulds; but more careful examina- [illegible] exact repetitions of each other. In the poses are slight variations, and especially if measured with precision, the dimensions of the bodies differ. Punches and moulds were employed only for quite secondary details and inside the figures; such as the rosettes that decorate the robes. One cannot doubt that the reliefs were not stamped. They were modeled freely.

[illegible] ways; either to trace a sketch on the body of the vase and then fill in the contours; or the reliefs were made separately like [illegible] work could only be done in place."

"The process of overlay was impracticable with figures so l[illegible] and so thin, so that it would be necessary to deform them further to fit them to the convexity of the ground. See now the ceramist might be imagined at work. With a fine point he first sketches the outlines and spreads the layer of slip, more or less thick according to the projection that he intends to give the image. Then he only has to model summarily the outline [illegible] formed in relief; hence the traces of the finger that are still quite visible on the vase of Athens. Most frequently the primitive contour must disappear beneath the clay applied. If s[illegible] traces of it remain, the potter can efface it at pleasure, or to accent the projection can form it anew and thus restore the edges. Modeling being completed, the engraving begins. By som[illegible] lines are marked the folds and embroideries of the clothing as well as the separation of adjoining parts. Punches when in[illegible]

mounted archers, and there a line of oxen that a warrior drives before him, then a band of hoplites on the march. What is most curious in this decoration is the frieze of archers. They with bow on shoulder and quiver on back have caps with top turned backward, that I have seen nowhere else (Fig. 86). Even the motive of the mounted archer is but very rarely found on the monuments of Grecian art.

When these amphoras have been studied and described, one asks by what procedure were executed the images decorating them. At first sight, it might be believed that then resemble each other, that the originals occupying the horizontal zones were stamped in the damp clay by means of moulds; but more careful examination proves that in these bands are no two figures that are e exact repetitions of each other. In the poses are slight variations, and especially if measured with precision, the dimensions of the bodies differ. Punches and moulds were employed only for quite secondary details and inside the figures; such as the rosettes that decorate the robes. One cannot doubt that the reliefs were not stamped. They were modeled freely.

"For the modeling itself, the workman could proceed in two w ways; either to trace a sketch on the body of the vase and then fill in the contours; or the reliefs were made separately like a flat cake, then applied on the ground. In both cases, the w work could only be done in place."

"The process of everlay was impracticable with figures so long and so thin, so that it would be necessary to deform them further to fit them to the convexity of the ground. See how the ceramist might be imagined at work. With a fine point he first sketches the outlines and spreads the layer of slip, more or less thick according to the projection that he intends to give the image. Then he only has to model summarily the outline thus formed in relief, hence the traces of the finger that are still quite visible on the vase of Athens. Most frequently the primitive contour must disappear beneath the clay applied. If some trace of it remains, the potter can efface it at pleasure, or to accent the projection can form it anew and thus restore the edges. Modeling being completed, the engraving begins. By some lines are marked the folds and embroideries of the clothing as well as the separation of adjoining parts. Punches then impressed

ornaments on the robes of women and on the caps of archers; b but all ttkis last work was pure decoration. The essential was the sketch. There could be manifested the originality of the artisan, in the choice of scenes to represent and in the grouping of the figures. Good or bad, the work of the Beotian modeler was indeed a personal work." 1

Note 1.p.170. Da Ridder. Bull.Corr.Hell. 1898. p.512-513.

Beotia touched Eubea. It must profit much by the vicinity of Chalcis, that city whose industry and commerce in the 7 th a and 6 th centuries had an activity, whose memory was preserved by histories; in these later times the monuments have confirmed the evidence of the literary texts. Rich by the product of the mines that it worked in the island, Chalcis fabricated besides arms and furniture of bronze, vases of the same metal that were sought in entire Greece. Doubtless inspired by these models, both for form and decoration of their vases, were the Beotian creators of this funerary pottery with reliefs. In the repertory offered them for the ornamentation of these pieces of great luxury, they only had to choose. For the horizontal bands, they took these continuous motives of files of animals or of warriors, single combats or preparations for combat, that we find on the painted vases; but for the scene on the neck, they had the care of adopting themes that recalled the local cults and their traditional rites, which thus corresponded to the funerary destination of these amphoras. The tomb was placed under the protection of the god of the country. Here they placed the image of Demeter, the patroness of the damp and rich lands of Beotia. There they represented the murder of the Gorgon, that the Beotian poet caused to figure on his shield of Hercules. Elsewhere it is the image of a chorus, one of those processions and dances of women repeated in all religious festivals.[1]

Note 1.p.171. We have already found these representations of the chorus in sculpture on metal pateras and in ceramic painting (Histoire de l'Art. Vol. III, Figs. 399,482; Vol. VII,Fig.59); we shall again find them frequently on painted vases of the c classical period.

All these amphoras have enough common traits that one could believe them sent from the same workshop, or at least all could

seem to date from the same time. According to the character of the fabrication, men incline to place their execution about the year 600. In that country has been found none of more advanced style. There was at a certain time a local fashion, that does not seem to have had a long duration.

If on these Beotian amphoras, the reliefs were modeled on place same as the body of the vase,[1] other types permitted the use of overlays made separately and then joined to the piece that theycdecorated. We have mentioned the island of Rhodes as a country in which there was a taste for this sort of ornamentation. Now here is a vase said to come from there, perhaps a perfume-burner. It is made of heavy and thick clay, like that of the smoked bucchero. It has the form of a cup supported by four cariatids. These are certainly related pieces, as well as the heads that project from the terminal lip of the vase. This vase is distinctly later than the Theban amphoras; it dates f-from the 6 th century.(Vignette at end of Chapter).

Note 1.p.172. From vases of form similar to the Beotian amphoras appear to come fragments gathered in the Cyclades (Revue Arch. 1905. p.286-291; Graindor. Vases archaiques a reliefs de Tinos). The fabrication of the images strongly recalls that of the reliefs of the funerary pottery of Thebes.

Because of the correct movement and the firmness of the design, there can be carried back no farther than the middle of the century the scene of a combat, that decorates a fragment collected at Sparta in the recent excavations.[2] It is the neck and a part of the shoulder of a vase whose form must be nearly that of the amphoras of Thebes. On the shoulder it had figures only in a horizontal band. The potter had represented there t those preparations for the combat, which we have already found elsewhere at the same place (Figs. 80, 81). A warrior follows his squire and is just mounting his chariot. Behind that chariot is a dog that seems to smell the ground. The outlines have a rare truth. On the neck are two warriors fully armed a d struggling together over a corpse. One of them has a round shield, the other a round shield with two notches like Beotian coins. Behind one combatant is an archer. Behind the other is a slinger holding in his hand a stone to be thrown. Perhaps the sling was indicated by a line of color. This scene, whose theme was furnished by an episode of the Iliad, is a commonplace of archaic

art, and the ceramic painters will still employ this motive f frequently during the entire 5 th century.

Note 2.p.172. Annual of British School at Athens.Vol.XII,p. 292;Pl.9.

The fabrication of these vases with reliefs did not cease w with the archaic age. Some are known that date from the 5 th and 4 th centuries; but the pieces so ornamented are then generally vases of much less size than the great jars to which this mode of ornamentation was first applied; in crateras,pitchers, aryballas and lecythes, is verified this persistence. Thus it remains established that the Greek potter inaugurated this technics and never renounced its practice; but it suffered during two or three centuries from the formidable competition of the painted vase. In the course of that period it was relegated to the second place; it continued, but in the shadow and quietly. When in the 3 rd century the industry of painted ceramics began to languish in Greece and to vanish soon after, decoration in relief profited by this decadence. It then produced vases of careful and very elegant execution, that are truly objects of luxury. Modeled separately and well attachedtto the ground, the figures project from the surface of the clay like those of a frieze in an entablature.[1] The potter then returns to methods, whose habit he appeared to have lost. He again sought his models in metal vases.[2] If he does not propose to reproduce their color and lustre, as formerly attempted in the time of the lustrous black bucchero nero, he copied their forms and ornaments. What served him to fill the surfaces of his vessle are the figures that the hammer of the chaser caused to project on the sides of the vases of gold, silver and bronze, where these fine and light overlays were firmly attached. During the entire duration of the Macedonian age, the type appearing to enjoy most favor in Greece is that of cups, very frankly accused of the imitation of metal. Then are commonly termed cups of Megara, because they were first invented and mentioned there; but in truth neither the first nor the principal centres of that industry are known. Soon after, the use of the pottern called Samian or Sigitte pottery is seen to extend into all countries bordering on the Mediterranean, then become Roman provinces. The most beautiful examples of them a

are spplied by the Tuscan workshops of Arretium, which ended in rivaling those of central Gaul, of the country of the Arvernes. About the beginning of our era, moulded pottery had everywhere killed and supplanted painted pottery.

Chapter XVIII. Painting.

1. Data to be utilized in writing the History of Greek Paintin

A singular history is that of Grecian painting, or better s-aid, of painting in Greece. For whoever would write it without the aod of the literary texts, by the sole evidence of the monuments themselves of this art, it would have an entirely paradoxical character, that of a defiance of all conjectures and all probabilities. Figures of geniuses, men and animals, have been preserved to us in Crete and Argolis, at Cnossos and Phaestos, Mycenae and Tyrins, on many fragments of frescos, and t those frescos date from at least 12 and perhaps from 15 centuries B.C. It has sometimes been asked if the authors of those paintings were truly, as we believe for our own part, the ancestors of the historical Greeks; but whatever solution is given to this problem, we know what colors were employed by the painters of that remote age, how they understood and rendered form in the cities, that all later must be counted in the number of Greek cities.

As these discoveries prove, it was then possible that certain images traced by the brushes of the masters celebrated by antiquity from Polygnotus and Micon to Parrhastes and Apelles, m might escape all chances of destruction. That hope has been c conceived; but it has not been realized. Even in the excavations executed with the most method and care, like those of Olympia and of Delphi, nowhere has been seen to appear, either on the smooth surfaces of the blocks that once formed the walls of porticos and of halls, or on the sheets of plaster detached from the surface, a trace of the decoration that the brush had formerly spread over the panels arranged by the architect. When the ruins of the edifices of Mycenaean Greece have been lost to view, to recover the mural painting, it is necessary to take the road to Italy and visit the caves of Etruscan cemeteries, then to descend to the age of Augustus, to study the frescor that decorate the house of Livia on the Palatine at Rome, and especially near Naples, those that owe their safety to the thick layer of ashes that Vesuvias has scattered over the cities, that it destroyed in the year 79 A.D. As for easel paintings, it goes without saying, that no one has come to us. The thin wooden panels on which they were painted, have not had for

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water cover them; they have not had the same fortune as the [illegible] the enterprise of the men and women of [illegible]

In these conditions, it is possible to form a somewhat precise idea of Greek painting, of what it was during the long centuries that passed away between the Dorian invasion and the beginning of the Roman empire when it produced works, whose [illegible] creation with those of the most famous architects and sculptors [illegible] a form and a color, represent them to the eyes and [illegible] their [illegible] character to be seized.

In perfection, the copy does not exceed its models. In [illegible] insufficient; but they are illumined when compared with [illegible] refer to it by the entire fashion and spirit of their decoration. Contemporaries of the paintings that formed the glory of the masters, these monuments reflect its figures and [illegible] in their appearance and style. We allude here to painted vases, to which it is necessary to add as products of the same technics, the funerary or votive plaques of clay, that were ornamented by pictures, and the terra cotta sarcophagi of the kind of those furnished by the cemetery of Clazomenae to the museums of Europe. Engravers of fine stones, those who executed the dies of coins, and the modelers that fashioned the terra cotta figurines, were inspired by the works of their time; they borrowed types from them and at a distance followed the movement [illegible] of vases ornamented by figures painted on clay. They [illegible] suffice for the needs of a prodigiously active commer- [illegible]

protection from destruction the safe retreats of the tombs in the valley of the Nile, and the marvellous drynes of the sands which cover them; they have not had the same fortune as the tablets glued on the mummy cases, that have preserved for us the portraits of the men and women of Ptolemaic and Roman Egypt.

In thesie conditions, it is possible to form a somewhat precise idea of Greek painting, of what it was during the long c centuries that passed away between the Dorian invasion and the beginning of the Roman empire when it produced works, whose authors in antiquity saw their names associated in public admiration with those of the most famous architects and sculptors? When this question is proposed, one is tempted to reply by a negative at the first moment. All the descriptions, anecdotes and judgments collected in the ancient writers, it is said, cannot replace the total absence of the monuments. Words determine a form and a color, represent them to the eyes and cause their true character to be seized.

On reflection, the case does not appear ro hopeless. In themselves alone the literary texts will remain obscure and very insufficient; but they are illumined when compared with certain monuments, that without depending on painting properly so-called, refer to it by the entire fashion and spirit of their decoration. Contemporaries of the paintings that formed the glory of the masters, these monuments reflect its figures and groups in their appearance and style. We allude here to painted vases, to which it is necessary to add as products of the same technics, the funerary or votive plaques of clay, that were ornamented by figures, and the terra cotta sarcophaguses of the kind of those furnished by the cemetery of Clazomene to the museums of Europe. Engravers of fine stones, those who executed the d dies of coins, and the modelers that fashioned the terra cotta figurines, were inspired by the works of their time; they borrowed types from them and at a distance followed the movement and progress of statuary. If was nearly the same for the decorators attached to the workshops supplying luxurious pottery, of vases ornamented by figures painted on clay. They likewise had to suffice for the needs of a prodigiously active manufacture; so that they fulfil without fatigue or delay their daily task, they were obliged to possess an entire repertory of patterns and sketches, or for the current work they not only inv-

invented subjects, but also as characterized by their attribu-tes and traditional poses, the figures comprised by each episode of the myths from which was preferably employed the materials of these illustrations; they even designed for most of t these themes the arrangement of the personages, that were seized best at first sight in the meaning of the scene represented at bottom of the cup, or one side of the amphora.

How was composed what we should call the portfolio of those ceramic painters? Authors do not tell us; but certain facts a are well attested in the history of the arts of the modern xx world, that give us an idea of what those portfolios must have been, to which designers constantly had recourse, in the best equipped workshops of ceramics. When one has commenced to study Italian faience of the 16 th century known under the nage of majolica, here is what is ascertained; usually from cartoons furnished by the best painters of the time, the artists worked whose brushes decorated by such rich colors the vases and plates of the workshops of Faenza, Gubbio, Deruta, Urbino and Venice. When these models were lacking, they were aided by engravings by Mark Antonio and other Italian masters; in the last quarter of the century, they frequently borrowed from Flemish engravings.[1] Cartoons and engravings gave them the personages and the grouping of the figures. At the same time in France, Penicand and Leonard Limousin in their painted enamels appear to have always utilized models similar to those used by the Italian artists in faience. There are found in their work very numerous copies of well known paintings.[1] The beautiful colorng of the enamel and the harmonious combination of the tones preoccupy the masters of Limoges, and to those these they devote their efforts. Men have even asked whether all of them knew h how to design, or at least if it was necessary to know it; they are sometimes satisfied to transfer to metal the sketches supplied to them by some famous painter.[2] Were it only to enclose the principal motive within those charming arabesques lavished by their fancy, the faience artists of Umbria must have freely used the pencil and brush; but no more than the French enamelers did they invent themes, and they have not created a style. The same necessity is always imposed on the arts that confine themselves to industry by the infinite multiplicity of the works

produced by them; they cannot seek the fountain of their life, cannot have sought elsewhere than in the major arts, in those that by the works conceived with reflection and executed without haste, express the highest thoughts and noblest sentiments of a people and an age. Those master works are adapted to the conditions of their special technics; they present transcriptions of them arranged or reduced, which they ornament in emulation by all the magic of colors that the fire is their capricious and powerful assistant, makes resplendent with so much brilliancy on the shet of copper or the vessel of clay.

Note 1.p.173. E. Muntz. Histoire de l'art pendant la renaissance. Vol. III, p.168, 254, 665, 725.

Note 1.p.178. Enamels of Leonard Limousin now in the Louvre were executed from the designs of Niccolo dell'Abbate, one of the Italian painters that Francis I called to decorate his chateaus. Some of these pretty sketches still exist; the edges of the paper are pierced by a needle in holes. It is divined that they were applied thus on a sheet of copper doubtless covered by a preparation, which by the aid of a point which followed the outlines, caused the transfer of all lines of the image. (Molinier. L'emaillerie, p. 291.

The situation of the ceramic painters of Greece was not entirely identical with those of our modern artworkers. Less advanced than have been from the 9 th or 10 th centuries of our era the Chinese and Japanese, the Greeks did not know how to repeat and fix an image by an impression on materials such as papyrus, parchment or cloth. They did not know printing. Among them the decorator thus found himself deprived of a precious resource, the assistance of those slight images that mobilize fresco or painting. The collaboration of the potters in fashion desiring to appropriate themes approved by the public, personages and groups, movements and characteristic expressions, were compelled to take their sketches at the place before the works of the masters, which they could not have done, if they had n not a great habit of drawing, rapid and sure, and with a free hand.

From the moment when mural painting had become the enthusiastic and faithful interpreter of the noblest religious conceptions of Greece and of the joys of its patriotism, the decorators of clay must suffer the influence of those works exhibited

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ered the multitude of citizens and of strangers. Those [illegible]
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to a certain personage and they assigned an attitude, that bet-
ter than any other seemed to correspond to the role attribut-
to him by tradition. There was a certain arrangement of a well
known scene, which seemed so happily invented as to be impose
henceforth on whoever treated the same subject. By a stronger
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the interpretation of the living form yearly became more and
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practice of novelties, such as the use of foreshortening, [illegible]
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only in profile. All these advances and conquests in executio
could not remain a dead letter for artworkers, who were less
paid by glory, yet acquitted themselves in their work with as
much intelligence and zeal as artists of genius.

The chiefs of the workshops must frequently have had the lo-
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ing of one of the better painters of the time. In such a case
could he fail to invite the collaborator to transfer to the
clay some of his most beautiful figures, some of the best rec-
eived fresco groups, famous then in all Greece? The vase was
destined for export. It would go to the Cimmerian Bosphorus,
to Cyrenaica or to Italy. Would not the distant purchaser to
whome it was offered pay more, when he believed himself cert-
ain to find there at least a partial copy of some masterpiece
that he could not hope to see so soon? About the year 460, the
impression was the same among all the pilgrims, that after [illegible]
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native cities. In the tales of their visits to the sanctuary,
they agreed in boasting of the beauty of the frescos of Pol[illegible]
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represented episodes of the sack of Troy by the Greeks and
the journey of Hercules in the realm of Hades. Is it not [illegible]
able that in those paintings of most careful execution, [illegible]

at Athens, Delphi and elsewhere, under the porticos where gathered the multitude of citizens and of strangers. Those works gave the tone for the myths and actions that they represented. To a certain personage had they assigned an attitude, that better than any other seemed to correspond to the role attributed to hig by tradition. There was a certain arrangement of a well known scene, which seemed so happily invented as to be imposed henceforth on whoever treated the same subject. By a stronger reason, those paintings for each epoch determined the character of what is properly called the style. Among them and by them the interpretation of the living form yearly became more and more correct and freer, that it appeared and entered into the practice of novelties, such as the use of foreshortening, front and three-quarter views came to put some diversity into those paintings, in which the faces had been so very long presented only in profile. All these advances and conquests in execution could not remain a dead letter for artworkers, who were less paid by glory, yet acquitted themselves in their work with as much intelligence and zeal as artists of genius.

The chiefs of the workshops must frequently have had the idea of taking for decorating choice vases, some heroic advanture, that quite recently had furnished the subject of a painting to one of the better painters of the time. In such a case could he fail to invite the collaborator to transfer to the clay some of his most beautiful figures, some of the best received fresco groups, famous then in all Greece? the vase was destined for export. It wowld go to the Cimmerian Bosphorus, to Cyreniaca or to Italy. Would not the distant purchaser to whome it was offered pay more, when he believed himself certain to find there at least a partial copy of some masterpiece that he could not hope to see so soon? About the year 460, the impression was the same among all the pilgrims, that after having been present at the Pythian games, resumed the way to their native cities. In the tales of their visits to the sanctuary, they agreed in boasting of the beauty of the frescos of Polygnotus, by which he had just decorated the lesche of the Cnidians. Now on more than one of the vases of that time are seen represented episodes of the sack of Troy by the Greeks and of the journey of Hercules in the realm of Hades. Is it not probable that in those paintings of most careful execution, the

ceramist has undertaken the task of reproducing some of the g groups, that had attracted the most attention in the celebrated painting? By the borrowings made from those grand pages of mytnical history he has desired to give in some sort, extracts from the book, what we would call choice morsels. Greece on t the morrow of the Median wars read the Ilon Persis of Arctonis of Miletus and the Nekyia of Homer in the translation into relief made by Polygnotus. This translation formed a new law, e even a new order. To renounce the types and groupings that it had accredited, required a succession of several generations of artists, and that taste should change.

Had all the historians of Grecian art applied themselves to seek on the vases of the first half of the 5 th century the more or less vivid trace of the genius and style of Polygnotus, we have no reason to believe that it would alone be the painters of history, whose works would have ben examined and utilized by ceramic painters. Why had not his predecessors, Boularchos, Eumares of Athens and Cimon of Cleonea, his contemporaries Micon and Pancesus, like his successors Parrhasius and Zeuxis, contributed in the same manner to supply the decorators of pottery their contingent of themes and groups, figures and expressive movements?

Certain paintings of vases may then serve us for comprehending and interpreting the evidence of ancient authors, those r relating to what we term historical painting. We cannot use t these paintings merely as engravings and photographs would be by a modern writer, that attempted to determine the talent of a painter from these documents without having seen his paintings; But it is still necessary to remark that the decoration of vases with black figures with their white and violet overlays greatly resembled that of the most ancient mural paintings. Even the coloring imitated them. It reproduced nearly the effect and appearance of the entirety. For vases with red figures, the difference would become more marked between mural painting and painting on clay; but even them, there would still remain in the copy what engraving retains of the painting.

If it be then established that we have been and must seek in the study of painted vases a useful addition to the very rare information gleaned in classical literature, the difficulty begins when it is necessary to survey for that purpose a mult-

multitude of vases, and to distinguish among those thousands of imiges, those in which mural painting is most probably reflected, with the peculiarities of its technics and the personal style of its most original masters. In that investigation is no general rule that can be applied everywhere. Only questions of species and of method to be followed in the attempt to solve them, will always be the same. The revealing indication of the presumed concord will sometimes be the identity of the theme. If we recognize in a vase painting a scene that must have its marked place in a painting mentioned to us as a work of the first order, we incline to believe that the ceramic painter was inspired by that painting, and that almost attains certainty, when in the ornamentation of the vase we recognize certain modes of interpretation mentioned by the texts to which we refer. Elsewhere this beginning of proof is lacking to us; for all the great frescos of the 5 th century, that do not have a detailed description of the kind left to us by Pausanias of the paintings of the lesche of the Cnidians; but sometimes even the execution of the ceramic painting suggests very plausible conjectures. On more than one vase it presents characters that seem to correspond to the definition that the ancient authors give us of the style of a certain famous painter. Then behind the modest work of the artworker, we believe we perceive that of the truly creative artist.

For the meaning of the subject, the choice of personages, t their distribution in the field and the movements assigned to them, painted vases under the reserves indicated above, cause us to best understand what may have been the grand compositions of Greek painting; but they are of less assistance to us, when we desire to obtain an idea of the part of color played in those paintings. Doubtless for the 7 th and 6 th centuries, vases with black figures furnish useful data in that respect; but it is no longer the same in the 5 th century for vases with red figures. They no longer preserve the lines of the connected models nor the trace of the contours. We must then seek elsewhere the information necessary to us, and we shall find some of value in the reliefs and painted steles.

Deprived of all internal modeling, the most ancient Greek reliefs, like those of the Egyptian tombs, are rarely more than paintengs in which the figures are as flat as the ground, and

are detached from it only by a slight projection. Those monuments hitherto received in our museums were cleaned and even scraped before entering them. They present only the natural gray of the stone; but since a half century, when sculptures of tufa or marble are taken from the earth in the excavations, men have always endeavored to seize and to note on those fragments even the least traces of color. The time of discovery is recorded, and knowing that these already faded tints have every chance of being paler and entirely effeced on contact with the air, men have been compelled to copy them in water colorsl executed when on leaving the trench the tones still retained some vividness. If the relief of Hercules and of Hydra in Attica, and that of Chrysapha in Laconia,[2] were brought to light with a coloring as visible, as that at first of many female statues of the Acropolis of Athens,[3] it would ferhaps have been thought right to credit those monuments to painting rather than to sculpture, as we have done. Whichever one of the t two arts one would connect the painters that contributed to t the execution of these works had on their palettes the same colors, as those who decorated the public edifices by their frescos. The same staff of artists sufficed for both tasks. By a remark of Praxiteles, whose memory is still preserved, we have the proof that painters of proved talent did not disdain to lend their assistance to the sculptors. When one asked the celebrated statuary which of his marbles he most esteemed:- he replied, "Those to whom the painter lent a hand." And Pliny adds:- "He attributed so much importance to its painting." [1] Now Nicias was the author of easel paintings, which the kings succeeding Alexander covered with gold.[2]

Note 1.p.182. Histoire de l'Art. Vol. VIII, Fig. 273.

Note 2.p.182. The same. Fig. 215.

Note 3.p.182. The same. Pls. III, IV, V. On this coloring of marbles see also Lechat. Note sur la polychromie des statues grecques. (Revue des etudes Anciennes. Vol.X, p.161-168).

Note 1.p.183. Pliny. H. N. XXXV,133.; Plutarch. Oeuvres mor-

Note 2.p.183. The same. H.N.XXXV, 132; Plutarch. Oeuvres morales. 1093 E.

On these statues and reliefs where we suspect and succeed in finding some touches of his brush, the painter interposed only as the auxiliary of the sculptor; but here are restored to our

curiosity by recent excavations are certain works, that he executed entirely with the sole resources of his art. We speak of those Attic steles on which the chisel has not been invited to cause the image remresenting the dead to project; this image was only painted on the slab of limestone or of marble.[3] On e each stele was a single figure. The motives and poses present little diversity. The coloring must be very simple; but there remains only very slight vestiges of it. Yet what gives reason to think that it comprised several distinct tones is, that the marble does not present the same appearance everywhere. Its s surface is more intact in certain parts of the image than on the rest of the field, a difference explained by a well known fact; certain colors resist better the dampness of the air and ground; they have preserved the surfaces that they cover.[4]

Note 3.p.180. G. Löschke. Altattische Grabstelen. (Athen. Mitt. Vol. IV, p.36-44, 289-306, Pls. I, II; A.Milchhöfer. Gemalte Grabstelen.(Athen. Mitt. Vol. V. p.164-194, Pl. VI).

Note 4.p.183. It suffices to recall here the find of several hundred painted funerary steles, that were discovered at Pagasae in Thessaly. They appear to belong to the 3 rd or 2 nd century B.C. If on the greater number of these steles, the painting has left only very confused traces, some 20 of them present very well preserved paintings.(Ephemeris. 1898. p.1-60, Pls. I-IV). On the same monuments, also see Rodenwalt. Zu den Grabstelen von Pagasae. (Athen. Mitt. 1910. P.118-138).

These steles are further not the only monuments of this sort, which can aid the historian in his research. Many other fragments of paintings on marble and on clay can be compared to them, some of which paintings appear to have had the character of v votive offerings. Others served to decorate temples or rich r residences. This has been proved by the excavations of Campania. In one of the most luxurious dwellings of Herculaneum have ben found five of these paintings, that have the appearance of drawings in red chalk. another entirely similar was discovered at Pompeii.[5] In those monochromes it is agreed to see very carefully executed copies of works dating from the Hellenistic epoch and perhaps earlier; the style of Zeuxis or of one of his contemporaries, that has been recognized in the best and least e effaced of his marbles, that of the plaques of knuckle bones, on which is read the signature of Alexander of Athens.

Note 5.p.183. In several programmes of Winkkelmannsfeste at Halle, Carl Robert has given the best commentary and the most faithful reproductions of those monochromes. I. Votive Gemälde eines Apobaten. 1895. II. Die Knöcherspielerinnen des Alexandros. 1897. III. Kentaurenkampf und Tragödienscene, zwei Marmorbilder aus Herculaneum. 1898. IV. Der müde Silen, Marmorbild aus Herculaneum. 1899. V. Niobe, ein Marmorbild aus Pompeii. 1903.

In spite of appearances, grecian painting has not entirely p perished. Although none of its original creations exist, an entire part of it can be seized and restored in large measure. This part saved from the lost work is the drawing; it is also the composition to a certain point.

No vase was a sufficiently large field to lend itself for the entire rendering of one of those vast entireties admired in the frescos of Athens, Platea or Delphi; but when the ceramic painter desired to present to his patrons a reduced image of one of his paintings, he had a choice between two methods:- by the elimination of persons in the second plane, he c could give a summary of the entire scene; or also he could select in these and take from it the episodes, that had most particularly attracted the attention of the public. Those abridgements or extracts suffice to show us how the contemporary masters of the brush grouped their figures, and understood how to render by expressive forms the idea of the feeling.

This is something, it is even much to know how a painter draws and composes; but it is not to know the whole. What distinguishes the art of the painter from the other arts of form is, that it attempts to reproduce the form not only as the touch revealed to the finger of the blind, but also as our eyes see the colored form, with the lights and shadows whose play modifies at each instanh the values and relations of the tones. C Color constitutes and defines the painting. Now it must be confessed that we have but a very imperfect idea of what the color could be in a fresco of Polygnotus or a painting of Apelles. By the ancient authors and by the inscriptions, we know what procedures were used by these artists; by the remains of the polychrome decoration of the architecture and sculpture, by the chemical analyses made of the substances gathered on these fragments, we also know what coloring materials then employed.

but what we do not know is what use then made of them, what v vigor they gave to their tones, how they degraded and dissolved them, how they made them gleam in the light, how they reduced and extinguished them in the shadows. All these questions are asked without the means of replying otherwise than by hypotheses, and it would run the risk of grave errors to pretend to solve these by examples taken from the mural paintings of Etruscan tombs or those of the houses of Pompeii or of Herculaneum. The most ancient Etruscan paintings resemble by the exclusive use made of yellow and red, of black and white, the oldest Greek vases. In the more advanmed , those at Tarquinii which appear to date from the 5 th cand 4 th centuries, the scale of tones is more varied, and by many details it is felt that the (1) authors of these paintings have been to the school of Greece for the drawing; but the costumes and types have a quite special and local character. The frescos of Pompeii are more difectly connected to the tradition of Grecian painting, yet one cannot admit that they have a right to represent that painting, that its masterpieces have survived in those paintings. Campanian frescos come too late; they cannot claim that role of honor.

Suppose that there had perished all the work of Italian or Flemish painters preceding the 16 th century A.D.; should that come by a glance at the paintings exhibited at the Salon in 1910 to form an accurate idea of the appearance presented by a fresco of Giotto or a panel by Van Eyck? With some few exceptions, the paintings of Pompeii are very mediocre. They were executed by very skilful decorators, that worked very rapidly and were paid by the square yard, as we would say. The tourist that has seen them and believes that he can recognize Greek painting of the classical age, would be the dupe of a singular illusion. He would not be able to judge of that painting, more than one is authorized to judge of modern painting, when he h has seen wall paper with subjects that represent the chief views of Switzerland or the adventures of Monte Cristo." [1]

Note 1.p.185.Paul Girard. La peinture antique.,p. 126.

The historian of Greek painting must then renounce the hope of attaining the same precision and certainty as the historian of sculpture. The latter labors on the monuments themselves.

He palecs himself before them when he wishes to define the style of a school or of a master, and even when those works have been broken and nearly reduced to bits, he finds in even the least fragment the ever vivid impression of the idea incorporated in that material. He feels this idea alive in all the accents of modeling, in the bites of the chisel that cut the marble, in what bronze or terra cotta allows to be divined of the play of the tool that fashioned in moist clay the sketch of the figurine or statue. It is entirely otherwise with the painting. There also we passionately desire to elucidate the assertions of the ancients, and to control their judgments by the study of the original works; but those withdrew from our sight and escape our grasp. We only see pale refelctions of t them in the monochrome images, that are further only partial reproductions, pages torn from the book.

According to all appearance, the final discoveries will never fill the gap that we have indicated. Our successors are c condemned in advance to experience the regrets that we have just indicated; but this cannot authorize us to lose interest in Grecian painting. We shall never have a clear and direct v view of this painting that time has reduced to dust, as we have of architecture and sculpture; but this is no rason to renounce in the history of Greek art, giving it the place and part to which it seems to have a right from the .dmiration, that it inspired in antiquity. We know the procedures employed by the literary texts, and by what may be termed minor painting, by the remains of the polychrome decoration of sculpture, by the steles on which color supplied the lack of relief, by the frescos of certain Greek or Etruscan tombs, and by the portraits painted on wooden panels, which the Egypt of the Ptolemies interred with its mummies; then it is necessary to search and determine what method and effects of great artists, in those works whose loss we deplore, can be deduced from all this technics and from those diversse methods.To form an idea of them, the historian in our days is no longer reduced to take into account only the word of Pliny, anecdotes more or less apochryphal and summary estimates nearly everywhere in writers mostly incompetent in the matter. Since there has been seized and measured the importance of the inquiring and regulating effect that historical painting exerted in ancient Greece on all trades

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it allows us to find again with an approximation that ... very close to the reality, the character of the arrangement of the design. [illegible] another, the progress of conception and of execution. We define by examples not arbitrarily chosen the genius of a master and the style of a school.[1]

Note 1.p.157. By making judicious use of all those indirect [illegible] living survey of this history under the title:- La peinture antique. (Bibliothèque de l'enseignement des beaux arts). The volume is illustrated by 285 well selected figures, all clear.

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It results from the study of the texts and of the monuments that Greek antiquity knew three methods of painting, fresco, [illegible] the theory of these different processes; they will be found [illegible] ize its technics.

Note 2.p.157. Nowhere has this theory been presented with more precision and competence than in the Memoir of Otto Donner. Abhandlung über die antiken Wandmalereien in technischer Beziehung) at the beginning of the work of Helbig (Wandgemälde der [illegible]).

As its name indicates, fresco painting (al fresco, the Italians say) is that executed on the fresh plaster of a wall. Its colors are diluted with water, but it employs only a small number, using only those of mineral origin. Colors furnished by the animal and plant kingdoms are forbidden to it, as well as all adhesives containing organic materials. Colors and adhesives would be attacked, decomposed and blackened by the lime contained in the plastering. If by its presence in the wall [illegible] him to reject certain tones, on the other hand it charges its

in which the artisan used the brush, one will no longer hesitate here to invoke first of all the evidence of the monuments. Doubtless it does not go so far as to show us the fresco or easel picture in its integrity, with its figures and grounds ornamented by the charm of color and its joyous variety; but it allows us to find again with an approximation that must be very close to the reality, the character of the arrangements and of the design. Here as for architecture and sculpture, we can now follow on fragments from one generation of artists to another, the progress of conception and of execution. We can define by examples not arbitrarily chosen the genius of a master and the style of a school.[1]

Note 1.p.187. By making judicious use of all those indirect means, Paul Girard has come to present a very clear and very living survey of this history under the title:- La peinture a antique. (Bibliotheque de l'enseignement des beaux arts). The volume is illustrated by 285 well selected figures, all black.

2. The different Kinds of Painting.

It results from the study of the texts and of the monuments that Greek antiquity knew three methods of painting, fresco, distemper and encaustic. We cannot undertake here to explain the theory of these different processes; they will be found explained in special works![2] It will suffice to define briefly each method by the traits that distinguish it and characterize its technics.

Note 2.p.187. Nowhere has this theory been presented with more precision and competence than in the Memoir of Otto Donner. Abhandlung über die antiken Wandmalereien in technischer Beziehung) at the beginning of the work of Helbig (Wandgemälde der vom Vesuv verschütteten Städte Campaniens. 1868).

As its name indicates, fresco painting (al fresce, the Italians say) is that executed on the fresh plaster of a wall. Its colors are diluted with water, but it employs only a small number, using only those of mineral origin. Colors furnished by the animal and plant kingdoms are forbidden to it, as well as all adhesives containing organic materials. Colors and adhesives would be attacked, decomposed and blackened by the lime contained in the plastering. If by its presence in the wall this lime thus limits the liberty of the painter by compelling him to reject certain tones, on the other hand it charges itself

with fixing the colors placed on the wall by the brush. [illegible]
[illegible]
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a sweat a solution of hydrate of lime. On contact with [illegible]
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over the entire surface a thin and transparent skin of [illegible]
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tion alone succeeds in detaching it from the colored surface,
that it protects from inclemencies.

The practice of fresco painting in the basin of the Aegean sea dates back even to the very ancient civilization of primitive Greece. At Thera, in all the villages buried under the ashes of the great volcanic eruption, lime plastering covers the walls of the houses, and already the brush traced there not only broad bands of many colors, but likewise foliage and flowers, whose vivid colorings it sought to reproduce.[1] In Argolis, at Tiryns and Mycenae,[2] at Cnossos,[2] and Phaestos [3] in Crete, that colored decoration is much more complex. Besides all varieties of linear ornament, there are seen to appear [illegible]
[illegible]
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the excavations have not brought to light edifices that date from that time; but the custom of colored plastering could [illegible] have been lost among the tribes, that on the calcareous soil [illegible]
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foot of the work, rocks from which was obtained lime. They built of small materials, and could not feel the need of concealing that rude masonry by polychrome roughcast, as their ancestors had done.*

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53. The Mycenaean tree and pillar cult. 1901.p.44-28, [illegible]
Note 4.p.188. L.Savignont. Resti dell'e to Micenea, scoperti nd Hagia Triada presso Phaestos., p.57-60, Pls.VII-IX. (Mon. [illegible]

with fixing the colors placed on the wall by the brush. While these penetrate into the wet layer that absorbs them as blotting paper absorbs ink, the lime perspires and casts forth as a sweat a solution of hydrate of lime. On contact with the air, this combines with carbonic acid. Thus it gradually creates o over the entire surface a thin and transparent skin of carbonate. This glazing is sufficiently hard to resist washing. Friction alone succeeds in detaching it from the colored surface, that it protects from inclemencies.

The practice of fresco painting in the basin of the Egean sea dates back even to the very ancient civilization of primitive Greece. At Thera, in all the villages buried under the a ashes of the great volcanic eroption, lime plastering covers the walls of the houses, and already the brush traced there not only broad bands of many colors, but likewise foliage and flowers, whose vivid colorings it sought to reproduce.[1] In Argolis, at Tiryns and Mycenae,[2]at Cnossos,[2] and Phaestos [3] in Crete, that colored decoration is much more complex. Besides all varieties of linear ornament, there are seen to appear plant forms and figures of men and animals. If in the time of t the reign of the geometric style, nothing has been found that resembles those frescos of the Mycenaean age, this is because the excavations have not brought to light edifices that date from that time; but the custom of colored plastering could not have been lost among the tribes, that on the calcareous soil on which they built their dwellings, and had everywhere at the foot of the work, rocks from which was obtained lime. They built of small materials, and could not feel the need of concealing that rude masonry by polychrome roughcast, as their ancestors had done.[4]

Note 1.p.188. Histoire de l'Art. Vol. VI, p.538-539;Figs.210-212.

Note 2.p.188. The same. Vol.Vi.p.532-543;Figs.205,213-219,222, 239-241,245; p.883-892; Figs. 437-444.

Note 3.p.188. A.J.Evans. The Palace of Cnossos, provisional report. 1900.p.12-13, 15, 1901,p.26,56,94, Fig. 17; 1902. p.58, 59. The Mycenaean tree and pillar cult. 1901.p.94-98, Fig.6?,Pl.V.

Note 4.p.188. L.Savignoni. Resti dell'e ta Micenea, scopteri ad Haghia Triada presso Phaestos., p.57-60, Pls.VII-IX. (Mon. ant. Acad. dei. Lincei. Vol.XIII, 1903).

Immediately after the renaissance of the arts in the 6 th a and 5 th centuries, while the ceramists borrowed from the fictions of the poets the themes of the decoration of their vases, other painters represented at a larger scale the same myths on the walls of temples and porticos; they also depicted there s sometimes historical scenes, especially battle views. The authors mention many of those works; they indicate the subjects of a certain number of them; they give a detailed description of some; but then nowhere state the procedures employed by the artists. Various conjectures have been expressed concerning them. A certain learned man has believed that wooden panels were fixed in the walls or suspended before them.[1] But the sole text that can be invoked in support of that hypothesis is of a very late epoch, the 5 th centurw A.D. and by a writer that never occupied himself with art matters.[2] It is further in contradiction of other texts more worthy of credit by their character and their date, with the countries used by contemporaries and historians of art, when they speak of the work of the great painters of the age of Cimon and of Pericles. Andocides relates of Alcibiades, that desiring to have his house painted, he shut up therein the painter Agatharicos and held him a prisoner there for four months.[1] Likewise Pliny says, that Polygnotus painted an edifice at Delphi (lesche of the Cnidians) and at Athens the portico called Poecile; he worked gratis for that portico, while Micon painted another part for a price in silver.[2] If some uncertainty may remain as to what Pliny meant by painting an edifice or a portico, all doubt concerning the sense that he attached to those words would be removed by the following phrase:- "Prusias painted with a brush, when it was necessary to rebuild them, the walls of an edifice of Thespies, that had formerly been painted by Polygnotus."[3] It would do v violence to the words to pretend to find here the mention of movabel pictures, paintings of Polygnotus, that had suffered from the effects of time, and were restored by Prusias.

Note 1.p.189. Raoul Rochette has sustained this opinion against Hittorf.(De la peinture sur mur chez les anciens, in Jour. des Savants. 1833. The different opinions expressed on this question have been surveyed and discussed by Letronne in his Lettres d'un antiquaire,etc. 1835. He returns to this debate in his Appendix aux lettres d'un antiquaire. 1837. He admits

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tre sense of santis is a plank or wooden panel; but Synesius [illegible]
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ching a precise sense to this term, to designate any painting,
whatever its fashion. If it be true that a governor of Achaia
despoiled the painted portico of its frescoes, he must have done so by a procedure similar to that employed today, by separating from the wall the colored plastering and fixing this on
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and painted the temple of Apollo of Delphi.

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[illegible] in the Greek compositions, that on the [illegible] [illegible] it has been proposed to admit that the artists painted, either in distemper or encaustic, on the marble itself, as they did [illegible] the [illegible] of Herculaneum.[4] This conjecture [illegible] it is little probable in the numerous [illegible] [illegible] ly after the middle of the 5 th century. Now if the marble [illegible] beautiful [illegible] easily given to it, lent itself to [illegible] [illegible] grain, which everywhere else formed the body of the [illegible]

that certain edifices contained paintings fixed in some way to the wall; but he establishes by very solid arguments, that the great compositions of the painters of the 5 th century were painted on the wall itself.

Note 2.p.189. Synesius (Letter 135) states that the stoa poikile no longer merits its name since a proconsul (Greek text). The sense of sanis is a plank or wooden panel; but Synecius l lived in Egypt, where easel paintings abounded that dated from the Hellenistic period, and he could write sanis without attaching a precise sense to this term, to designate any painting, whatever its fashion. If it be true that a governor of Achaia despoiled the painted portico of its frescos, he must have done so by a procedure similar to that employed today, by separating from the wall the colored plastering and fixing this on a ground. We know from Pliny that this operation was commonly practised at Rome. When the temple of Ceres was rebuilt there, which was decorated by the paintings of Damophilus and of Gorgasos, "those paintings were detached from the wall and enclosed in a frame of planks." (H.N.IV. XXXV, 45). These paintings with borders, wall panels placed on planks surrounded by a frame were the sanides of Synecius. Pliny, for another work of the same kind employs the expression "wooden form." (H.N.XXXV,45).

Note 1.p.190. Andocides. Against Alcibiades. 15. (Greek).

Note 2.p.190. Pliny. H.N.XXXV, 59; see XXXV,40. Aristoclides, who painted the temple of Apollo of Delphi.

Note 3.p.190. Pliny. H.N.XXXV, 123. (Latin).

Then one can doubt that he could not fail to see true mural paintings in the great compositions, that on the morrow of the Median wars came to decorate the walls of public edifices; but it has been proposed to admit that the artists painted, either in distemper or encaustic, on the marble itself, as they did to whom we owe the monochromes of Herculaneum.[4] This conjecture appears to us no better founded than the preceding one. First it is little probable in the numerous edifices thus decorated, that the walls were made of marble blocks. Great edifices constructed entirely of marble were scarcely at Athens, and only after the middle of the 5 th century. Now if the marble with the beautiful polish easily given to it, lent itself to directly receive painting, it was not the same with limestone of coarse grain, which everywhere else formed the body of the structure.

Further, it results from several texts treating of mural paintings of that kind, that they were usually executed on what we term plastering, that the Romans called the covering. Pliny s says:- "There exists at Elis a temple in which Panaemus, brother of Phidias, had applied a coating into which entered milk and saffron; thus even now when the walls are rubbed by the thumb moistened with saliva, the odor and taste of saffron are perceived."[1] Elsewhere he speaks of a very beautiful painting, the ornament of a temple of Sparta, which the ediles Murena a and Varro undertook to transport to Rome to decorate the Comitium. The coating was detached, then applied to brick walls a and enclosed by a frameoof wood.[2]

Note 4.p.190. This hypothesis was expressed by Carl Robert in his first work on Polygnotus. It seems to be renounced there. (Marathonschlacht, etc. p. 104.

Note 1.p.191. Pliny. H. N. XXXVI, 55.

Note 2.p.191. Pliny. H. N. XXXV, 49. Vitruvius reports the same fact (II, 8-9), and employs the same terms. The mention of the coating again appears in Pliny in regard to very ancient paintings, that were admired in the first century A.D. in the old temples of Latium at Ardea and Lanuvium (H.N.XXXV,6). What completes the showing that this can only be a question of mural paintings, are the details given by Pliny. The paintings in one temple had retained their freshness, although the ceilings of the edifice had disappeared. If this referred to movable panels, they could not have been left exposed to all storms; in the temple of Ardea and at Lanuvium, Caligula could easily have satisfied his desire to appropriate those paintings. What prevented him from so doing was that the wall was in too bad a state to bear the delicate operation of detaching the coating.

A careful examination of certain antique monuments confirms the conclusions to which we had been led by the study of the texts. This is the case for an edifice in exceptional preservation at Athens, known to all travelers by the name of temple of Theseus. It appears to be demonstrated, that like the true Theseion, the Anakeion and the painted portico, there were mural paintings which covered the entire wall. This had a height of about 19./ ft. between the terminal cornice and the dressed slabs forming a plinth at the bottom of the wall, which

was not polished like the surface of the plinth, but only cut with the pick.[3] If on that wall the marble must remain visible, would it have been allowed to present this appearance of unfinished work? It is difficult to admit, when one thenks of the minute care shown everywhere by the masonry of Attic structures of the 5 th century. This cannot be the effect of negligence of the workman; but when it is supposed that a painted decoration was applied on that part of the surface, it explains the form given to it; this is just what would make it most fitted to receive and retain the coating on which would then extend the colors. Placed on a smooth vertical plane, the stucco would not have adhered. On the contrary, the setting and adhesion were guaranteed by the roughness of the stone.

Note 3.p.191. The fact is attested by a letter of Dörpfeld consulted by Carl Robert on this subject (Die Marathonschlacht in der Poikile, etc. p.88). It had already attracted the attention of careful observers, notably of Semper and of F. Thiersch. (Letronne. Lettres d'un antiquaire a un artist, p.100-105).

It is the same with the walls of the hall on the Acropolis of Athens, that was found on the left of the Propylea and commonly called the pinacothek. There also in the interior the w walls had not been polished; they were only pointed.[1] In the time of Pausanias, there were paintings in that hall, some of which were still visible, while others had been effaced by time. 2
This last indication does not cause one to think of easel pictures. Why would one collect and keep in a sort of museum paintings on which the eye longer distinguishes nothing? On the contrary, there is no difficulty if there are referred to mural paintings what Pausanias says of those vanished images. Tourists visited that chamber with a pious curiosity, admiring what remained of the antique works, and seeking in what was no more than a vague and light shade, the trace of the genius of former times, just as today in the refectory of S. Maria della Grazie in Milan, they attempt to find in the faded colors of the Last Supper of da Vinci the traits given by the great painter to Jesus and his apostles.

Note 1.p.192. Letronne. Lettres d'un antiquaire a un artist. p. 110,(on the evidence of an architect of Dreux). Beule, L' Acropole d' Athenes, p. 108.

Note 2.p.182. Pausanias. I, 22-6. (Greek text).

If in those edifices, the wall by its mode of dressing shows the office that it formerly fulfilled, it long since lost all its coating; there remains on the marble neither a plate nor even a bit.[3] This cannot be surprising. Those buildings are 25 centories old and have always been occupied. After the fall of paganism, the temple of Theseus became a church. As for the P Propyleion, this served during the entire middle ages for residence and storage until the freedom of Greece. The dukes of Athens had their palace there; Turkish agas dwelt there. Due to the excellence of the masonry, those walls remained standing and have retained all the feneness of their joints; but as a result of the different uses given to the rooms composing them, how many times must they have been washed and scraped, repainted or whitewashed!

Note 3.p.182. Still an excellent observer, F. Thiersch, describes the internal wall of the cella of the temple of Theseus as "recovered by white stucco, on which are yet perceived lines incised in different directions, confused remains of drawings without vestiges of color." (Letter of March 24, 1834, to the Library of the Institute.

The question is then solved; Grecian antiquity practised mural painting, that preceded in Greece painting in a studio. In the 6 th and 5 th centuries, it was particularly by grand compositions displayed on the walls of porticos and temples, that the painters rivaled the sculptors. It is possible that some of these artists may have sometimes painted on wood panels; some paintings of this time are cited in the sense in which we now understand this word;[1] but not by works of this sort did Polygnotus and Panaenos become illustrious, neither their predecessors not their contemporaries. Customs changed in the 4 th century. Since then by easel pictures were especially made the reputation of painters; but if no longer to mural painting adhered the preference of Apelles and of Protogenes, a taste for them was never lost, neither in the Greece of the successors of Alexander nor in Hellenized Italy. While in the Orient skilful decorators covered with colors and figures the houses of the rich merchants of Delos,[2] other artists in the West passed their brushes over the walls of Etruscan tombs and on those of the temples of Caere, Lanuvium and Ardea. Rome even

found her Polygnotus in Fabius Pictor, who on the walls of the temple of the goddess Salus, to flatter the pride of his contemporaries, had represented the battles and victories of the second Samnite war. This tradition had never been interrupted, continued by the paintings of the Rome of Cesar and Augustus, then by those of the cities covered by the ashes of Vesuvius.

Note 1.p.193. Pliny,(H.N.XXXV, 59) mentions a painting of P Polygnotus, that in his time was exhibited at Rome in the portico of Pompey.

Note 2.p.193. Marcel Bulard. Peintures murales et mosaiques de Delos.(Foundation Piot, Monuments et Monnaies. Vol.XIV).

These paintings of the Palatine, of Casa Tiberina and of Pompei, for the entire period of classical antiquity, are the only ones that we possess in numbers, and consequently are the sole ones to which direct observation can usefully be applied; now the most competent judges do not hesitate to declare, that all were executed on wet plastering; but they admit that on certain particularly careful paintings, certain colors that would have been decomposed by the lime, and that were required by t the painter for the effect that he desired to obtain, were laid afterward by the distemper process on the dry plaster.[3] Those retouches do not appear to have been in very frequent use, and did not take from that painting its true character; this remained and was everywhere fresco. Several chemical analyses were made of the colored stuccos of Pompeii. Those appearing to merit most confidence allow one to affirm, that in the particles detached from those frescos are found only the colors commonly used in fresco, and that no trace is found there of wax, nor of any adhesive, such as egg, gum or milk.[1]

Note 3.p.193. The members of the Academia Ercolanese, when for the first time they published these passages, they stated them to have been executed in distemper, and other learned men have spoken of encaustic; but a painter of merit, Raphael Mengs, pronounced for fresco, also Mazois, the architect who in recent times studied with the most care the ruins of Pompeii. Otto D Donner, a painter by profession, has resumed at leisure this study at the place; he has himself practised the various processes between which men hesitated; he believes that he can affirm that much the greater part of the Pompeian paintings are frescos in the proper sense of the word. Distemper played a

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not a single example of it.(Die erhaltenen Wandmalereien. [illegible]
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much fidelity a number of the paintings of Pompeii. He rejec-
all idea of encaustic painting; but he believes that fresco
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compositions of some importance were painted in distemper. (Pe-
tit, La ville, les maisons, les arts, p. 374-376). On the con-
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painting, are of Donner's opinion, and recognize frescos in
most of the paintings of Pompeii (H. Gros and C. Henry. L'enc-
austique et les autres procedes de peinture chez les anciens.
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ner have been contested by a German painter, Ernst Berger, who
desired to see in all Pompeian painting only encaustic painting
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zu den Versuchen zur Reconstruction der Maltechnik des Altert-
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für Malerei, of Sept. 1, 1903).
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p. 95-112.

In these conditions, how could one ascertain that the ancients did not know fresco painting, or at least if they used it, that it was "only to lay flat tints on a wall or to trace there ornaments of slight importance?"[2] We believe ourselves justified in recognizing frescos in the entire decoration of the Campanian cities, as well as in the most complex compositions and the figures of noblest order, as in arabesques, garlands and ornamental designs. If this be so, is there some reason to [illegible] [illegible] of painting, between the golden age of classical art and the first century A.D.? No text authorizes us to suppose this [illegible]
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very secondary role there; as for encaustic, he has found not a single example of it.(Die erhaltenen Wandmalereien, p.1-11). The question of technics much less attracted the attention of the artist Pierre Guzman, who very recently reproduced with much fidelity a number of the paintings of Pompeii. He rejects all idea of encaustic paintings; but he believes that fresco was little used at Pompeii, and is inclined to think that most compositions of some importance were painted in distemper. (Pompeii, la ville, les maisons, les arts, p. 374-378). On the contrary, Henry Gros and Charles Henry, who then also studied this question as technicians familiar with the various processes of painting, are of Donner's opinion, and recognize frescos in most of the paintings of Pompeii (H. Gros and C. Henry. L'encaustique et les autres procedes de peinture chez les anciens. Histoire et technique. p.97-105. 1884). The assertions of Donner have been contested by a German painter, Ernst Berger, who desired to see in all Pompeian painting only encaustic painting, and who claims that the ancients did not practice fresco (Beiträge zur Entwickelunggeschichte der Maltechnik. Erläuterungen zu den Versuchen zur Reconstruction der Maltechnik des Altertums bis zur Auggang der Römischen Reiches, nach der Quellschriften und chemischen Untersuchungen. 1893). Donner has not had difficulty in proving that his opponent has badly studied the monuments and badly understood the texts that he cites.(See his criticism in the Review entitled:- Technische Mittheilungen für Malerei, of Sept. 1, 1903).

Note 1.p.194. O. Donner. Die erhaltenen Wandmalerei, etc. p. 85-112.

In these conditions, how could one sustain that the ancients did not know fresco painting, or at least if they used it, this was "only to lay flat tints on a wall or to trace there ornaments of slight importance?" 2 We believe ourselves justified in recognizing frescos in the entire decoration of the Campanian cities, as well as in the most complex compositions and in the figures of noblest charm, as in arabesques, garlands and ornamental designs. If this be so, is there some reason to admit that a true revolution may have been produced in the technics of painting, between the golden age of classical art and the first century A.D.? No text authorizes us to suppose this profound change. Nothing remains of the treaties written by trade-

tradesmen in which might be sought information of this kind;[1]
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on composition and colors (XXXV, 40).
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interpretation of this text given by Letronne (Lettres, etc.p. 464-473). He translates enkausis as if it were sohydati, and understands the images as in a way painted on water, that has no sense.

If there be little but this indirect mention, Latin interes-
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explain the method to follow in the preparation of the plas-
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ence is ensured to this decoration, when it is placed on the
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one has delayed too long and allowed the stucco to harden.[4]
They also state the colors suited to fresco, and those whose use is forbidden.[5] They indicate how some of the latter giving beautiful tones, can be utilized after the completion of the
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All that is not their invention. That should be seen in the w
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instance for the brush, and others to execute the paintings i
under the best conditions of effect and of duration.

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Note 4.p.155. Vitruvius. VII, 3-7,8.
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By examining each layer on the walls of the houses of Pomp-
eii, it has been proven, that the composition of the diffe
rent corresponds to the rules of Vitruvius and Pliny, at leas

tradesmen in which might be sought information of this kind;[1] but there is found in Plutarch a clear allusion to the processes of fresco. He opposes images traced on fresh plaster as susceptible of being quickly effaced, to those in encaustic, where fire has made them imperishable by causing the melted wax to penetrate into the wood.[2]

Note 2.p.194. Letronne. Letters d'un antiquaire, etc. p.370.

Note 1.p.19.. Pliny mentions a book of Apelles on his art.((XXXV,30). Another celebrated painter, Euphranor, had written on composition and colors (XXXV, 40).

Note 2.p.195. Plutarch. Erotikas. XVI,15 (p. 759 C). One cannot imagine anything more difficult and more forced than the interpretation of this text given by Letronne (Lettres, etc.p. 364-376). He translates ephygrois as if it were ephydati, and he understands the images as in a way painted on water, that has no sense.

If there be little but this indirect mention, Latin literature is here of very defferent assistance. Vitruvius and Pliny explain the method to follow in the preparation of the plastering destined to receive the color.[3] They state what permanence is ensured to this decoration, when it is placed on the wall while still wet, and what danger of crumbling is run when one has delayed too long and allowed the stucco to harden.[4] They also state the colors suited to fresco, and those whose use is forbidden.[5] They indicate how some of the latter giving beautiful tones, can be utilized after the completion of the main work, for the retouches placed on the already dry plaster.[6] All that is not their invention. What should be seen in the w whole of these precepts is the summary of the experience of n numerous generations of workmen and artists, who for centuries were employed in Greece and Italy, some to prepare the surfaces intended for the brush, and others to execute the paintings u under the best conditions of effect and of duration.

Note 3.p.195. Vitruvius. VII, 3-5,7; Pliny. H.N.XXXVI,176.

Note 4.p.195. Vitruvius. VII, 3-7,8.

Note 5.p.195. Pliny. H.N.XXXV, 49.

Note 6.p.195. Pliny. H.N.XXXV, 45.

By examining each layer on the walls of the houses of Pompeii, it has been proved, that the composition of the plastering there corresponds to the rules of Vitruvius and Pliny, at least

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the true nature of these paintings to be mistaken.[1] In the fi-

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perceive that the entire field of the painting is not exactly

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paintings are very visible joint lines. Each morning the stone-

co-worker placed on the wall the portion of the plastering that

the painter had to cover in the day; however skilful he might

be, this workman did not always succeed in concealing the joints. In the frescos of Pompeii are seen neither those irregularities of the surface nor these seams. That is because the plastering is much thicker and retains the water in its lime

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could work more at leisure, could paint his entire picture at

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changes of the ground.

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frescos of Rome and Pompeii had an average thickness of 2.6 to 3.2 ins. For modern frescos, it never exceeds 1.2 ins. (O. Don-

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stucco on the pillars of the gallery in the celebrated Loggia of the Vatican, decorated after the designs of Raphael, is only 0.12 in. thick; hence the greater part of the painting has fallen. At Delos, the stucco that received the painting had a thickness varying from 0.08 to 0.80 in., but it is applied on

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a thickness of 0.6 to 1.2 ins. The layers of mortar supporting the

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in number for certain more careful decorations. (Bulard. Les peintures murales, etc. p.160-161).

Precision and excellence of the stuccos [illegible]

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commenced, by artists of the second or third order working [illegible]

rapidly, all concur to give the same impression: the [illegible]

rators of Roman and Campanian walls are [illegible] of the

[illegible]

in structures built with most care. Made of several layers of sand and stucco, this superficial crust is much thicker than that, which in the edifices of modern Italy serves to support the celebrated frescos, and this difference in thickness explains a different appearance , that has contributed to cause t the true nature of those paintings to be mistaken.[1] In the frescos of the Renaissance, it suffices them with some care, to perceive that the entire field of the painting is not exactly in the same plane, and that between the various parts of the painting are very visible joint lines. Each morning the stucco-worker placed on the wall the portion of the plastering that the painter had to cover in the day; however skilful he might be, this workman did not always succeed in concealing the joints. In the frescos of Pompeii are seen neither those irregularities of the surface nor those seams. That is because the plastering is much thicker and retains the water in its lime very much longer, perhaps for 5 or 6 days. Thus the painter could work more at leisure, could paint his entire picture at one time without having to count on those beginnings and those changes of the ground.

Note 1.p.196. In its different layers, the facings for the frescos of Rome and Pompeii had an average thickness of 2.8 to 3.2 ins. For modern frescos, it never exceeds 1.2 ins. (O. Donner. Die erhaltene Antike Wandmalereien, p. 31, 40-41). The s stucco on the pillars of the gallery in the celebrated Loggias of the Vatican, decorated after the designs of Raphael, is only 0.12 in. thick; hence the greater part of the painting has fallen. At Delos, the stucco that received the painting had a thickness varyind from 0.08 to 0.20 in., but it is applied on a double layer of mortar separating it from the wall and having a thickness of 0.8 to 1.2 ins. The layers of mortar supporting the stucco on which was applied the colors, are even 3, 4 or 5 in number for certain more careful decorations. (Bulard. Les peintures murales, etc. p.180-181).

Precision and excellence of the methods recommended by the theorists, the results obtained late and when the decadence c commenced, by artists of the second or their order working very rapidly, all concur in giving the same impression: the decorators of Roman and Campanian walls are direct heirs of the masters, that in the eyes of the Greeks represented the highest

ideal of nobleness and of purity that painting had ever attained. The processes applied to them dated back thousands of years. The first idea of them had been suggested to the distant ancestors by the rudeness of the primitive masonry and the necessity of a coating that required color; they were then developed and perfected with the progress of the art, and transmitted from father to son, from workshop to workshop, they passed from Greece to Italy. There were frescos always and everywhere in Greece; this causes that no Greek writer, except specialists whose works are lost, has thought to call attention to this kind of painting. Habit kills curiosity.

In that architecture of primitive Greece from which we have demanded the secret of many survivals, wood played a great p part. With masonry of rubble forming the body of the edifice, and at the same time protecting it from rain and enlivening i its appearance, men must very early decide to spread a color on the surfaces of beams or planks exposed to the air;[1] but to make that color adhere and remain, they did not have to count on the dampness of stucco, as in fresco, and which dries up the color, and on the transparent glaze of the covering carbonate of lime. It was then necessary to use a method practised for many centuries by the Egyptians, that is called distemper.[2] Thus is designated a process of painting with the brush where the colors are mixed with an adhesive, such as the egg, sap of the figtree, milk, glue, gum, etc., applied on a coating of the same nature, for example on chalk or plaster mixed with size. When the adhesive is not too great in quantity, the applied colors dry in contact with the air; the painting scales, breaks and falls; hence the need of applying the colors in thin coats, drying well before retouching." 3

Note 1.p.197. Histoire de l'Art. Vol. Vi,p.731-732.

Note 2.p.197. The same. Vol. I, p.783-786.

Note 3.p.197. H. Gros and C. Henry. L'encaustique, etc. p.89.

Texts of Vitruvius and of Pliny attest that the ancients knew the use of the various adhesives that we have just enumerated, also the same as those employed by the artists of the middle ages and of the Renaissance, until the practice of oil painting was well known;[4] there are still those that use it in the entire Orient, as the workmen that make the icons of which orthodox Christians make a great consumption. One can paint

in distemper on stone and on wood, also on linen and on paste-board, as did the Egyptians on their mummy cases; but this was particularly on wood, for the qualities of strength and lightness, to which the Greek painter had recourse when he abandoned the custom of great compositions widely extended on the walls of public edifices, and he preferred to concentrate his effort on a small number of figures collected in a smaller space. For that purpose was especially sought the wood of the larch; it passed for never decaying and never cracking by heat.[1] There were advantages that must have been much appreciated. P Paintings recommended by the reputation of their authors thaveled much. From Athens or Rhodes, they went to Alexandria, Antioch and pergamon; they were later transported to Rome.

Note 4.p.197. For the use of gum and glue, Vitruvias. VII,10; Pliny. H.N. XXXV,25; ; XXVII, 71; XIII,20; for eggs, Pliny. H. N.XXXV,25; for milk, Vitruvius, VII, 14; Pliny,XXXV, 56.

Note 1.p.198. Pliny. H.N.XVI,73. The woods commonly employed do not offer the same guarantee. All the boards on which are painted portraits of Egyptian men and women of the Ptolemaic and Roman periods are now grooved by cracks lengthwise the fibres of the wood, that much injure the effect of the painting.

We have so far assumed that all these portable paintings were executed in distemper. This must be the case for many of them; but others were executed by the different process of encaustic. Encaustic appears to have been particularly in vogue in the A Alexandrine and Roman periods. According to a number of texts with sensible agreement, it seems that when the authors then speak of painting, they mean encaustic painting without needing to say so in express terms;[2] but this kind ceased to be practised in the middle ages, and in modern times there has been much discussion to arrive at forming an exact idea of what it could be, and to recover works, rightly placed to its account.[3] Due to the recent researches conducted in a truly c critical spirit, after the question remained for a long time very obscure, it has finally been illumined, and it can now be regarded as solved.[4] Debate can now only be on a certain particular and secondary part of the method; but there remains no doubt concerning the principle itself of the method.

Note 2.p.198. Those texts have been collected by Gros and H henry, L.'Encaustique, p.4-10.

Note 3.p.198. Cros and Henry cite and analyze the most interesting of the works devoted to the study of this question, which since the Renaissance has occupied learned men (L'encaustique, b. 67,68). Also see Winter, Ueber enkaustische Malerei. (Arch. Anz. 1897. p. 132-136).

Note 4.p.198. Besides the frequently cited work of Cros and Henry, see the chapter entitled, Die drei Arten der enkaustischen Malerei der Alten und die Kausis, in the Treatise of Otto Donner. A 10-30).

As indicated by the name designating it, what characterized this kind of painting is the effect produced on it by fire. This name is derived from the verb kaio, to burn; Kausis is c called burning, the work of the painter. In the Latin writers is found the term cauteria, burning, derived from the Greek; it qualifies in a general way the instruments used by the same painter. The verb inuere, to cause the colors to penetrate by burning, constantly reappears in the mentions made of paintings of this sort.[1] As for the mode of operating, it is defined by the use of colors mixed with wax. Heated on the coals of a chafing dish, these colored waxes were in the fluid state when applied with the brush; then they were brought to that state when they had been fixed on the ground of the painting by cooling." It was necessary to continue the effect of heat on them. The burners or hot irons must touch the color, enter the wax, melt and manage it; they served to prolong the too brief period of the work of the brush; they broke the tones, blended them into each other, finished the modeling and covered it, as it is said. The term heater sufficiently indicates that the artist must p possess them of all forms and dimensions; it is a generic term. we say likewise, the stamps of the bookbinder." [2]

Note 1.p.199. Pliny. H.N.XXXV,31.

Note 2.p.199. Cros and Henry. L'encaustique, etc. p.10.

One could already be able to form some idea of those instruments from the nature of the work presumed by the handling of the wax, but there are more certain indications for their restoration. The principal one of them, which the artist most frequently had in hand was called kestros in Greek and vericulum in Latin.[3] Now kestros was the name of the betony, a plant of the labiate family, that was famed for its medicinal properties.[4] The leaf of the betony is long, indented and pointed at

the end (Fig. 87). If the tool in question received the name of kestros, this certainly was because it had the same form as the leaf of the betony; then by that analogy we can represent the cestros mentioned by Pliny (Fig. 88).[5] As for the word vericulum, Pliny defines it in another place, where it results from the context, that it was a spatula serving to skim silver in fusion.[1]

Note 3.p.199. Pliny. H.N.XXXV, 41.

Note 4.p.199. Pliny. H.N. XXV, 48.

Note 5.p.199. There is a question in several ancient authors of a weapon bearing the name of cestros or cestrophendone, and according to many allusions made to it, which must on a larger scale have nearly the same form as the tool of the painters. See the texts cited on this subject by Cros and Henry, p.13, Note 2.

Note 1.p.200. Pliny. H.N.XXXIII, 35.

Texts and monuments agree in showing us what composed the t tools of an encaustic painter. Here is how a lawyer briefly a alludes to them. "The apparatus of a painter having been bequeathed, the waxes, colors and other similar things enter into the legacy, as well as the brushes, heaters and shells".[2] Now in Vendee was uncovered an interment, that appears to be that of a woman devoted to painting. There were taken from it terra cotta dishes and glass vases still retaining remnants of wax and of resin, little cups, a mortar with two little pestles, that served to powder the coloring materials, two brush handles and a wood palette, a bronze box of colors, a box containing two spatulas of the same metal (Fig. 9_). In the report made of this excavation, there is no mention of the furnace; but from the shape, we ask if in the tool represented at the right and below in Fig. 92, it is not proper to recognize a holder in reach of the hand of the painter in the course of the work and filled with burning coals. He would have held by its long handle and have warmed his tools at it. This vase has nearly the form of the warming pan that we use to warm the clothing on sick beds.

Note 2.p.200. Martian.

Note 3.p.200. B. Fillon. Description de la villa et du tombeau d'une femme artiste Gallo-Romaine decouverts a Saint-Medant des Pres. 1849, p. 36.

Bits of resin form a part of the equipment of the Vendean t tomb. As attested by other documents, the resin took part with the wax in this painting, either as a vehicle of color, or dissolved in drying oils as a varnish. The ancients knew the use of varnish, called atramentum by the Latins, doubtless because it made the tones darker and sombre. In encaustic and distemper, the varnish protected the painting, just as the transducent scale of carbonate of lime in fresco. It is said that Apelles spread on his paintings a varnish envied by other painters, of which he kept the secret.[1] By examination of certain ancient paintings, it is believed that a thin coat of wax sometimes had the function of varnish.

Note 1.p.201. Pliny. H.N.XXXV,97.

Note 2.p.201. Cros and Henry. L'encaustique, p. 32.

Occupied in aiding the memory, compilers of the kind of Pliny never mention an industry or an art without attaching thereto an inventor's name. Thus Pliny found in an author consulted by him, that the invention of encaustic painting was attributed to Aristides, a contemporary of Apelles;[3] but as he observed the fact himself, paintings of that kind were known to have b been executed by artists that lived long before Aristides; for example, some by Polygnotus. We cannot verify this assertion; but we know by offocial tests, that about the end of the 5 th century this process was applied at Athens by the workmen, that labored to decorate the cornice of the Erechtheum.[4] It is very probable that the use of this technics dated much earlier in Greece. Like many other practices, that of colored wax must h have been imported from Egypt to Greece in the 7 th and 6 th centuries. The Egyptian museum at the Louvre possesses sarcophaguses of granite and of wood, on which the sunken figures still retain quite notable quantities of green wax. It even seems that the Greeks knew how to mix the color with wax long before the time when the Ionians went to the school of Egypt. With wax mixed with pitch were painted the hulls of vessels;[1] This custom was already diffused in the time of Homer. The poet gives to the great barks that transported his warriors the epithets "miltoparnos and phoinikoparnos" (with red cheeks). There could be no question either of fresco or of distemper for colors that must be lashed and washed by the salt waves. The only process to ensure the necessary resistance was that of painting

hot, which caused the color to penetrate into the pores of the wood.

Note 3.p.201. Pliny. H.N. XXXV. 122. In that entire passage are names that do not seem in place. There are suspected either confusions made by Pliny or the faults of copyists. One is surprised to see Praxiteles mentioned as having perfected the process of painting in encaustic. Yet perhaps there may be seen an allusion to the aid that he gave to the painter Nicias for the coloring of his statues; but what is still more surprising is the mention of a signature of Lysippus with the formula "enekaen" on paintings, that he executed at Egina. It has been p proposed to substitute the name of Elasippos for that of Lysippos.

Note 4.p.201. C. I, Att. Vol. I, No. 324.

Note 1.p.202. Pliny. H.N.XVI, 23; XXXV, 31, 41. Ovid. Fastes IV, verses 275-276. (Latin verses).

If Pliny informs the reader of no great matter concerning t the origins of this painting, he puts no more precision and clarity in the little that he says of the different applications of its methods. Here is the text:- "There were anciently two methods of painting in encaustic; on the wax (we understand by that, on a wax ground) and on ivory with the cestros, i.e., vericulum, until one has begun to paint the waves. Then was added the third mode in which the brush is used after having melted the wax by fire, a sort of painting that on vessels changed neither by sun, salt water or winds."[2] Pliny begins by joining together the two modes of painting having in common, that the cestros played the chief part; but it should be concluded that the brush also had there to fulfil its task. That must have spread the colors on the ground. Traces seem to be found on some monuments, that are regarded as specimens of that encaustic painting. If it be not a question of it in regard to the first group, this is because its work there was only a sketch and a preparation. The picture being sketched by the brush with the melted wax, only assumed form by the intervention of the cestros, a mediator between the tones and a creator of harmony. It was otherwise in the painting of vessels. There were no more refined transitions nor delicacy to be sought. All that was desired was to give to the coat of color a thickness and solidity that would defy the storms. The sole instruments needed by the painter were great brushes with which the color was spread;

Pliny so defines the process by the exclusive use made of those brushes.

Note 2.p.202. Pliny. H.N. XXXV, 41. We adopt for this text the punctuation and translation of Cros and Henry (p.11); it is only thus that it presents a reasonable sense.

It is unnecessary to insist further on this painting of vessels; it belongs in the list of what we term structural painting. As for art painting, it results from various indications scattered in the ancient classical authors, that it comprises many varieties; this is what has been termed the deviations from encaustics.[1] It even seems that in the course of those e experiments the ancients may have been very near reaching the practice of oil painting. However that may be, it man be interesting for men of the trade to study thoroughly all this technics with its secondary processes, its recepes and tricks, but what is important here is to seize the spirit and principla of the method employed by masters like Prusias, who owed their r reputation to the success that then obtained in painting with wax.[1] Now on more than one point, the excavations have yielded instruments in which have been recognized those indicated by the authors as devoted to that sort of painting, and from the character of these instruments, one has been able to form a v very clear idea of the kind of work, that they were suited to perform. This idea agreed with that suggested by the terms employed by the Greek and Roman authors, when they had occasion to mention encaustics. By this twofold way were obtained results that can inspire all confidence; but what increases their value even more is, that experiments very well conducted have verified the hypotheses to which had led the researches of the archaeologists. Those experiments had already been attempted in the 18 th century by Comte de Caylus; but they have been recently resumed under much better conditions by M. Henry Cros.[2] He is a sculptor and painter and was associated for those researches with M. Charles Henry, a very well informed learned man. He had over his ingenious predecessor the advantage of being able to appeal to monuments unknown to the former, and by the concurrence of his collaborator, he knew how to subject the texts to a more rigorous criticism. From these texts he started to recover the processes of the ancient painter; he made the equipment at the command of that painter, and he used

[illegible]
now the paintings that be executed thus are found to present
[illegible]
either by chemical analysis or by the nature of the work, [illegible]
[illegible]
paste in which the work of the tool has left the same traces.
The agreement cannot be more complete.

Note 1.p.208. Gros and Henry. L'encaustique, p. 35-41.
[illegible]
[illegible]
pratique personelle de l'encaustique, p. 73-87.

Of all the monuments which permit this instructive comparison [illegible]
[illegible]
ted on thin cedar boards, which under the Ptolemies and the [illegible]
[illegible]
cases. The most beautiful of these portraits are found in the
Graf collection, that could be seen some years since exhibited
[illegible]
cerns. To one of them belonging to the Louvre is applicable
[illegible]
from a heliogravure of the Graf collection). "The execution is
quite special. By the transparent quality of the tones is recognized
the wax. By grooves followed in the neighborhood, and [illegible]
[illegible]
melted material, is recognized the cestrum. There are lines [illegible]
like those made by a flat brush, but too long to be due to this
cause. This would rather be the effect of the passage of a flat
[illegible]
again induced by a sort of spatula on the flat side of which
were made varied lines by means of a point, like the teeth used
for giving nerve the last finish; all these precautions [illegible]
are for the purpose of being able to spread the wax without
[illegible]
toothed, and that the painter's tool thus better conforms to
the etymology of the name that it bears." 1

Note 1.p.208. Gros and Henry. L'encaustique, p.24-28.
[illegible]
[illegible]
which the wax colors assert their presence by the thickness of
the coating and the irregularities of the surface. These [illegible]

it for painting on wood and other materials encaustic paintings. Now the paintings that he executed thus are found to present exactly the same appearance as the antique paintings, in which either by chemical analysis or by the nature of the work, men are agreed in recognizing as paintings with wax. It is the same paste in which the work of the tool has left the same traces. The agreement cannot be more complete.

Note 1.p.203. Cros and Henry. L'encaustique, p. 35-41.

Note 1.p.204. Pliny. H.N. XXXV, 123.

Note 2.p.204. Cros and Henry. L'encaustique. Chap. VI:- Notre pratique personelle de l'encaustique, p. 79-87.

Of all the monuments which permit this instructive comparison, those whose evidence is most decisive are those portraits, painted on thin cedar boards, which under the Ptolemies and the f first Roman emperors in Egypt were nailed on the lids of mummy cases. The most beautiful of those portraits are found in the Gräf collection, that could be seen some years since exhibited in Paris; but the principal museums in Europe now possess specimens. To one of them belonging to the Louvre is applicable a description, which nearly avails for all the others.(Pl. X, from a heliogravure of the Gräf collection)."The execution is quite special. By the transparent quality of the tones is recognized the wax. By grooves hollowed in the painting, and which seem to have had a tendency to be filled by the cooling of the melted material, is recognized the cestros. There are lines l like these made by a flat brush, but too long to be due to that cause. This would rather be the effect of the passage of a flat instrument like a tooth chisel, a rougher of the same type, or again indeed by a sort of spatula on the flat side of which were made varied lines by means of a point, like the rasps used for giving marble the last finish; all these precautions a are for the purpose of being able to guide the wax without baring the panel. Remember further that the betony leaf is t toothed, and that the painter's tool thus better conforms to the etymology of the name that it bears." [1]

Note 1.p.205. Cros and Henry. L'encaustique, p.24-26.

Among these portraits on wood, there are some that are painted in distemper;[1] but much greater is the number of those in which the wax colors assert their presence by the thickness of the coating and the irregularities of the surface. Those have

not been beaten and flattened; in spite of the merit of certain portraits, and of what they possess of vigor and effect, this is work done in haste by artists of the second order, supplying the cemeteries. The same technics are found applied with more science and patient skillon a celebrated piece, the bust of a woman painted on slate and possessed by the museum of Cortona in Tuscany (Pl. XI, from Gazette archaeologique. Vol. III, Pl. VII). The execution is much more delicate and justified than in the Egyptian portraits. Is this the muse Polymnia, as the Italians desire? Is it one of those players on the lyre, who come to charm by their harmonies the guests of feasts, as thought by the learned Frenchman, that called attention to it?[2] We cannot say. "She troubles by her lowered great black eyes, whose divergent glances that seem to penetrate the envelope, with their long and light lashes, her fine eyebrows, this straight nose, those rosy lips animated by a voluptuous mouth, t this neck exquisitely moulded, this uncovered breast that provokes and the other transparent under the caressing drapery, the chestnut hair that flows in silky waves separated by the shoulder, and that coquettish crown. The coloring is soft, the drawing is delicious in purity. The process is evidently encaustic, carried to its last perfection. Reliefs are evident in the leaves of the crown, at the right over the eye and at the left near the ear, the attachment of the neck forms a quite sensible hollow, but which has perhaps been exaggerated by the careless tracings made of the muse. The modeling is very divinely treated; the drapery, breasts, arms, neck, brow and ear, are marked by lines like those of a pencil; the neck and throat seem passed over again; no trace of a brush, but everywhere are those of an instrument long or flat according to the case. Does not this sufficiently designate the cestros?" [3]

Note 1.p.206. Cros and Henry. L'encaustique. p.24-91.

Note 2.p.20o. Fr. Lenormant. Peinture conservee a Cortona. Gaz. archaeol. Vol. III, p. 41-50. Pl. VII.

Note 3.p.20o. Cros and Henry. L'encaustique, p. 19-20. In t the Article of M. Lenormant will be found the entire history of the monument aud of the works to which it has given rise. Lenormant and Cros, while knowing it only by mediocre reproductions, were disposed to believe it modern, a work of the Renassaince; but their opinion was modified when they had opport-

As types of ancient encaustic paintings, we have cited an entire series of portraits on wood and also one figure on slate [illegible] itself to very different materials. One can paint in encaustic on all sorts of grounds. "Woods of different species (Caylus recommends fir), linen covered by a coat of size, stone, [illegible] pictures. Yet it is necessary to ensure that these surfaces are not damp. Hence one can paint with no other preparation than to apply a coat of white wax with the brush, that enters the pores and entirely disappears by warming with a burner used by painters of buildings to remove old oil painting from wood. There is even no need of this preparation. One can paint on dry on the bare wood, except for protecting and covering with [illegible] be absorbed into the ground under the later effect of hot iron [illegible] . . . .

This method offers precious advantages; it is even better in certain respects than that, which is almost alone in use since the end of the 14 th century A.D. "All colors cannot be used with oil. For example, difficult to use are vermilions, carmine and cochineal, lakes in general and blacks. On the contrary, wax combines with all colors. The palette of the encaustic artist is then much richer than that of the painter in oil."

[illegible] sun or by the heat of rooms. The wax protects from molds and [illegible] the materials covered by it. It [illegible] very [illegible] testimony of [illegible] on the subject of [illegible] with wax and [illegible]." [illegible] in Egypt are [illegible] in [illegible] not [illegible] any other painting. I have seen a woman's [illegible] [illegible] [illegible] in a rose color that after 2000 years retains [illegible] freshness, all whose colors, even those of [illegible].

opportunity to examine the original in place and at leisure. neither doubts that it is an antique. Further, to judge otherwise would be to get into great embarrassment; it is difficult to indicate a school in which that technics was in use in modern times.

As types of ancient encaustic paintings, we havi cited an e entire series of portraits on wood and also one figure on slate! this indicates that this technics of wax and hot irons adapted itself to very different materials. One can paint in encaustic on all sorts of grounds. "Woods of different species (Caylus recommends fir), linen covered by a coat of size, stone, plaster, slate, pasteboard, and even paper, perfectly receives this painting. Yet it is necessary to ensure that these surfaces are not damp. Hence one can paint with no other preparation than to apply a coat of white wax with the brush, that enters the pores and entirely disappears by warming with a burner used by painters of buildings to remove old oil painting from wood. T There is even no need of this preparation. One can paint directly on the bare wood, except for retouching and covering well the parts poorly treated with the brush, where too much would be absorbed into the ground under the later effect of hot irons."1

Note 1.p.207. Cros and Henry. L'encaustique. p.85-86.

This method offers precious advantages; it is even better in certain respects than that, which is almost alone in use since the end of the 14 th century A.D. "All colors cannot be used with oil. For exampce, difficult to use are verdigris, carmine and cochineal, lakes in general and blacks. On the contrary, wax combines with all colors. The palette of the encaustic artist is then much richer than that of the painter in oil."

"Encaustic painting does not scale; it cannot alter in the sun or by the heat of rooms. The wax protects from worms and dampness the materials covered by it. It attracts very little dust, and finally time has scarcely any effect on it. Hear the testimony of Prisse d'Avennes on the subject of monuments painted with wax and naptha." Some cartons made under the 18 th Dynasty in Egypt are painted in charming tones not approached by any mural painting. I have seen a woman's coffin moulded in l linen covered with plaster, in the form of a case, whose delicate front in a rose color that after 3000 years retained a charming freshness, all whose colors, even those of fitting,

presented such harmonious tints, that they were a real pleasure to the eyes." [1] The colors dried almost instantly; what an aid to the inspiration always so ready to fly away! The work can be indefinitely retouched without being obliged to entirely scrape off the painting, which the oil painter is forced to do, but without obtaining the desired result. Sometimes at the end of some years the former desires to repair the detail that he believed effaced under the superficial coat. The wax gives a silky lustre to the tones. Finally, this painting has a relief causing it to partake of the beauties of sculpture. Subjects painted in wax may acquire a marvellous intensity of life.[2]

Note 1.p.208. Prisse d'Avennes. Histoire de l'Art égyptien. 1879. p.291.

Note 2.p.208. Cros and Henry. L'encaustique, p.86-87.

We have described and attempted to define the various processes used by the Greek painter, and among which he could choose according to circumstances. It remains for us to seek which of those processes were applied in the rare monuments of antique painting that have reached us.

If in Gneece itself remains no fragment of a fresco belonging to the classical age, what can replace for that period the loss of so many vanished works are the paintings of Etruscan tombs. By the study of their style approximate dates can be assigned to those paintings. The most ancient would be of the 6 th century, and the most recent to the 3 rd.[3] Now those paintings a are indeed frescos.[4] They were executed with the only colors permitting the use of that process on a coating of sand and lime. The coat of plastering is there much thinner than that bearing the paintings of Pompeii. The average thickness is scarcely 0.40 inch; but this difference is explained by the nature of the support on which was applied that plastering. There it was not laid in the open air on a very dry wall of rubble and bricks, as in the cities of Campania; it was laid in the coolness of a cavern on a rock fully saturated by what is called quarry water; consequently although thinner, it must therefore retain for a very long time the moisture without which t the color can neither set nor form the crystalline glaze that covers it.

Note 3.p.208. J. Martha. L'art etrusque. 1889.p.421-450.

Note 4.p.208. O. Donner. Bull dell'Inst. di Corr. Arch. 1889, p. 20.-20.. Nowhere is found white lead, that the lime would have attacked.

Etruscan painting has its originality by the number of subjects treated and by many types peculiar to it as by a certain taste for realism; but from many themes familiar to it, many figures placed in its paintings and the movements given to them, one discovers that it was not satisfied vith taking models from the decoration of Corinthian and Attic vases; it must also have suffered the influence of Greek painters, who seeking fortune outside, left the Hellenic cities of southern Italy to establish themselves in those rich Etrurian cities, where they were certain to find well paid employment of their talents. From those foreigners serving them as masters, the Tuscan artists must have also borrowed their technics, they learned the trade at their school. For distemper as for fresco, one is then right to appeal to the Etruscan cemeteries, and there is by chance one of them, that of Tarquinii (Corneto) has rendered to us a monument, that is now one of the most precious pieces in the archaeoligical museum of Florence. I mean the alabaster sarcophagus, whose four sides are decorated by paintings that represent Greek warriors in combat with the amazons.[1] Two long Etruscan inscriptions are engraved on it, and the very awkward w work of an Etruscan workman is recognized in the scluptures of the lid, the reliefs of the two pediments and the four female heads in the round, that ornament the four angles; but the paintings of the coffer have nothing more of the Etruscan. Of all monuments found until this time in that country, none has such a marked Greek character as the sarcophagus of Corneto, said the learned man that gave the description of it.[2] If this sarcophagus had not been discovered in Etruria, if it were not m made of a material certainly taken from the soil of Italy, no one would hesitate to proclaim it a Grecian work."[3] If the author of these paintings were not a Greek by birth, he could o only be a Tuscan, whose hand and eye were trained in the school of a Greek master.[1]

Note 1.p.209. W. Amelung. Führer durch die antiken in Florenz. 1897. No. 211. The paintings will be found drawn in line in Mon.dell'Inst. Vol. IX, Pl. LX. Several parts of them have been reproduced in the original colors in Jour. Hell. Studies.

1883. Pls. 36-37. The most developed and most interesting of all those studies devoted to this monument is that of Sydney Colvin in the Jour. of 1883, p. 354-369. Also see the Article of Klügmann in Annili. 1873. p. 239-251.

Note 2.p.209. W. Helbig. Scavi di Corneto. (Bull. dell' Inst. 1869. p. 192-201).

Note 3.p.209. The lid is of Carra marble, coffer is cut in a sort of alabaster, whose quarry is found in the same territory of Corneto.

Note 1.p.210. This is also the opinion of Klügmann. Sydney Colvin inclines to the same solution. Dennis is disposed to s see there the work of a Greek painter.(Cities and Cemeteries of Etruria. 2 nd edit. 1881. p.96 et seq).

Thus if there be very strong reasons to place to the credit of Greek art this decoration of the Etruscan sarcophagus, it is important to know the technics that it bears. Then one can no longer think of fresco. Here is found a color that fresco does not tolerate, white lead, which would be attacked and blackened by lime. There is further no fresco without a plastering laid on the ground; there is not the least vestige of this plaster on the sarcophagus.[2] The tints have been placed directly on the surface of the alabaster. The question then only lies between the two processes, distemper and encaustic. There cannot be seen a product of encaustic. The painting is not plastered on; nowhere is perceived the trace of the cestros and of its effect to mix and melt the colors.[3] All the work was executed with the brush alone. This is a rare and precious monument of distemper painting, which was preserved to us by the tomb of Corneto.

Note 3.p.210. Cros and Henry. L'encaustique. p. 91-92, Figs. 21, 22.

At first one asks how those colors could remain almost intact in places for long centuries, without the intervention of fire to cause melted wax to penetrate into the pores of the alabaster; but on examining the stone more closely, one takes into account the method which the painter took to ensure the duration of his work. He did not give the field a polish that would have made it slippery; the surface everywhere was left irregular, with little scattered hollows in which was deposited the color. Due to this precaution, it has adhered well, even

after the organic substance serving as adhesive was decomposed on contact with the air. It has become friable; is detached by the finger; but while not touched, it remains firm and lively. It has suffered only at the base of the coffer, where after having been hit by fragments of rock falling from the roof, t the sarcophagus was crowded between the rubbish among which oozed the dampness of the ground.

This battle of the Amazons must date from the 4 th century [4] or the beginning of the 3 rd. This is then the most ancient example that we possess of an antique painting executed in distemper. To find others, it is necessary to come down to the 1 st century of our era, to the portraits on wooden boards furnished to us by Egypt. Most of those were painted with hot wax; b but there are some in that series of images with their light and transparent colors, that present an entirely different appearance than those where one divines from the thickness of the coating, the use and work of the cestros. The brush alone traced the contours and modeled the face.(Fig. 93).

Note 4.p.210. Helbig freely goes back for this monument to the vicinity of the year 400. Klügmann and Colvin would be disposed to come down to about the year 300.

Likewise as to be able to cite antique frescos, we have been compelled to transfer ourselves into Campania, it has been necessary to present authentic types of distemper and of encaustic, for us to turn to Etruria and to Egypt. However both of the two last processes are represented by paintings much more ancient than all the monuments to which we have had recourse, and that are distinguished from them in that they come from Greece itself, and at least in part from Attica; I mean those funerary steles on which in place of relief that ordinarily fills the field, the decorator has only placed a colored image, that does not project from the ground. The question is to know how that color was applied, if it was cold with the use of some adhesive material, or indeed hot and mixed with melted wax. On the one hand, we have the proof by the sarcophagus of Corneto, painted in distemper on marble; but on the other, we know by an official document, that men also employed fire and wax to color fine architectural ornaments. We have the accounts of the expenses incurred for the completion of the Erechtheion in the course of the year 406. They mention twice in two different prytanes

The encaustes and particularly the workman,"who painted in encaustic the cymatium on the architrave of the interior."[1] We likewise know from Vitruvius that wax was applied on woodwork of carpentry.[2] Also encaustes were employed for the coloring of statues.[1] It is probable that for painting on marble as for painting on wood, according to circumstances men sometimes used distemper and sometimes encaustic; but in the state in which nearly all these steles have come to us, it is very difficult now to say in what list one should place them. Perhaps it would be possible to solve the problem for a small number of them, where small bits of color are still attached to the stone; these being studied by a chemist would yield the secret of the mixture; but I do not believe that such analysis has ever been attempted. Besides, on most of those monuments the image is distinguished from the ground only by a difference of tone. The skin of the marble has remained more intact where during a long time, it was protected against storms by a coating of paint. What is detached in the field by the appearance of an outline of dark tint is not the color itself; it is its delayed reflection; the persistent trace left on the field. In these conditions it is impossible to affirm anything concerning the nature and composition of that color. Yet there are paintings on marble which would seem to have been executed rather by distemper than by encaustic. This is notably the case of the celebrated monochromes of Herculaneum and of Pompeii. Nothing indicates the work of the cestros or of a similar instrument, The modeling is obtained by very fine lines that assume the use of a very fine brush.[2]

Note 1.p.211. C.I.Att. Vol. I, no.324. Analyses made by Landerer of the remains of coatings taken from various antique monuments of Athens have confirmed the evidence of the inscriptions. Those have revealed everywhere the presence of oil and of wax. (Rangabe, Antiquitates helleniques. p. 63). See Hittorf. Restitution du Temple d'Empedocles, p. 47.

Note 2.p.211. Vitruvius. IV, 2. (Latin).

Note 1.p.212. Histoire de l'Art. Vol. VIII, p.221. Note 4. Plato also speaks of "those who painted statues." (Republique. IV, p. 420 C); but he does not state what technics they used.

Note 2.p.212. Carl Robert. Die Knöchelspielerinnin des Alexander. p.8-10.

Still we should incline to think, that most frequently for t this kind of painting, the encaustic process must be preferred to that of distemper. Perhaps by this means one might force t the color bette into the pores of the marble; but in every case an advantage is found in it; thicker and less liable to decompose than the color with eggs, the coat of color with wax had all the chance of longer resisting dampness.

It is not always easy to know what methods were employed by Greek artists to execute the mural paintings and easel pictures mentioned by the ancient authors, men are nearly decided on the nature of the colors used by the painter, those that he s spread on his palette. Numerous finds made at different points of the antique world have caused the finding of many specimens of those colors, either in the state of cakes and sticks, or in the cups and shells from which they were taken by the brush. We cannot enter here into the detail of the analyses of them which have been given. The results of those researches will be found in special works, in which have been collected the indications on this subject furnished by such writers as Vitruvius and Pliny.[1]

Note 1.p.213. Cros and Henry. L'encaustique, p. 113-130; O. Donner. Ueber die antike Wandmalereien. Chap. VIII, p.95-111; Die chemischen Analysen antike Wandmalereien und aufgefunden Farbstoffe und Ingredienten.

3. Archaic Painting according to the Texts.

Primitive Greece had practised the art of painting. Its artists had exhibited qualities of invention truly remarkable in the choice of their themes and in the composition of their paintings. In spite of certain naive inaccuracies, their drawing frequently had a singular freedom and exactness. They had put into their colors a simple and gay vivacity, which very well suited the part that those images should play in the decoration of princely edifices. But especially in European Greece, t the entire effort of work of that civilization had left only weak and confused memories in the minds of the Greeks of the historical period. Deep layers of rubbish concealed from their view the frescos , such curious fragments of which have been found in these last yeaes as by miracle. For all that concerns the history of letters and of arts, tradition does not go back to that forgotten world; it scarcely passes beyond the 7 th or

8 th centuries, and to that epoch already distant relate the few vague statements, that the Roman compilers borrowed from Greek sources.

We are poorly infommed on the origins of Greek painting, on what developed and flourished at the same time as sculpture in classical Greece. The little that we know of it comes from a page of Pliny, and it is believed that one can suspect that certain errors have slipped into the summary, that he presents of the assertions of the author who served him as a guide.[1] In him, whoever he may be, is divined a Greek. The national vanity is displayed by the disdain with which he treats as boasting the statements of the Egyptians, who affirm that then cultivated painting thousands of years before that art was known by Greece. Yet we now know, that nothing is accurate.

Note 1.p.214. Pliny. H.N.XXXIV,15-16. Carl Robert has very severely criticised this summary of the art of painting and would be disposed to take scarcely any account of it.(Die Anfänge der Malerei, in Historische Märchen, p. 121-151). Studnicza expresses a more favorable judgment on this text, and inclines to attribute more importance to that source.(Antenor und die archaische Malerei, in Jahrb.1887, p.135-168. The second part of the Memoir has for titke:- Die älteste Malergeschichte bei Plinius.

After having thus thrown the Egyptians out of court, Pliny reports that the Greeks were divided on the question of knowing whether at Corinth or at Sicyon painting was invented, to borrow from them a very improper term, that he loved to use. He does not decide between the rival claims of the two cities; but he adds that the agreement was complete on the idea, that the historian should begin with that art and the character of its first attempts. Men had commenced by enclosing with a line on a plane surface the shadow cast on it; then later filled t the interior of this first sketch with a single color. Thus w was created the painting called monochrome. In spite of all improvement of the technics, Pliny remarks that this method h had not fallen into entire disuse; monochromes were still executed in his time; without this evidence, that could be divined from the excavations of Herculaneum and of Pompeii.

It is not from observation of the facts that proceeds all of that explanation, there is felt to be a theory built on presum-

presumptive data. However far one ascends with the monuments in the plastic arts, nowhere and no more in Greece than elsewhere does one realh that hypothetical period of the simple line drawing, no more than it will be found in the graphic attempts of children. When these have drawn a man or a house well or badly, they hasten to daub the body or the roof; they use colors for that purpose, or at least a pencil; in the last case, they cross hatch it, great hatchings in proud and exact parallelism. To speak here only of Greece, it is the same for the Mycenaean vases as for those of the Dipylon. The painter has placed everywhere in his images, sometimes flat tints and sometimes a sort of stippling, closer from one monument to another; but he never left void the space enclosed by the countour lines. What follows has the same character, both systematic and floating. This painting which gave merely the mass of the body projected in outline on a ground. Pliny attributes its invention to a certain Philocles, otherwise unknown, that he calls an Egyptian, and to Cleanthes of Corinth. Was this Cleanthes the same as the artist under whose name were shown in a temple near Olympia in Elis two paintings, one of which represented the taking of Troy and the other the birth of Athena? [1] Neither Strabo nor Atheneus say anything of the time when this Cleanthes lived or of the style of his works, and it is difficult to reply to this question. Philocles and Cleanthes had as successors Aridikes of Corinth and Telephanes of Sicyon. They would have employed but one color; but the progress whose honor was referred to them, would be that of having first within that outline traced lines, that by detaching the members from t the trunk and accenting the movement of those members, would have given some idea of the modeling of the body. Pliny does not state how they executed this work, if it was with a brush dipped in a light color, or as did the decorators of Corinthian vases, by the aid of a point, which removed the surface color and allowed that of the coating to appear.

Note 1.p.216. Strabo.VIII,343; Atheneus, VIII,p.346,B,C.

The color employed for these monochromes could only be black, that black easily derived from powdered charcoal or the soot of a furnace. Again to an artist of Corinth, Ecphantos, was d due a second innovation; he had conceived the placing on the black touches of a red tone furnished by brickdust. This is

the same principle as that of those violet coatings so l[illegible]
employed by the Corinthian potter. Painting had truly c[illegible]-
ed with these touches, that varied and enhanced the appear[illegible]
[illegible].

Even when the painter used two tones, he had not yet the di[illegible] in sufficient precision and freedom to succeed in defining and distinguishing by a diversity significant of the po[illegible] and by the particular expression of the lines of the face, the various persons that he borrowed from the rich repository of poetry. Before figures very similar to each other and [illegible]sed in a small number of very similar attitudes, the spectator [illegible] relieve from embarrassment the painter and his public. From the 6 th century it was in current use; the habit was [illegible]opted, of writing a name beside each person.[2] Did painters of frescos first take this method? We do not know; but always the painters of vases and sculptors did the same. Painting further remained much longer attached to this practice than did sculpture. [illegible] is kind are still read on the reliefs of the treasury of Cnidos.[1] There has been found no trace of them in the 5 th century [illegible] every person in the frescos of Polygnotus at Delphi. Pausanias noted where it was wanting.[2] On vases, the custom of these legends scattered on the field of the painting was retained for very much longer.[3]

[illegible]

[illegible]

[illegible] certain things seem to be the invention of Polygnotus.

Note 3.p.217. The same desire to aid the spectator in his [illegible] knowledge of the subject suggested the use of the same expla[illegible] [illegible]

Of this birth and first progress of painting, the author followed by Pliny divides the honor between Sicyon and Corinth. While then Athens did not count, the industry of Corinth ha[illegible]

the same principle as that of those violet coatings so largely employed by the Corinthian potter. Painting had truly commenced with these touches, that varied and enhanced the appearance of the painting.

Even when the painter used two tones, he had not yet his drawing in sufficient precision and freedom to succeed in defining and distinguishing by a diversity significant of the poses and by the particular expression of the lines of the face, the various persons that he borrowed from the rich repository of poetry. Before figures very similar to each other and juxtaposed in a small number of very similar attitudes, the spectator would have had great difficulty to divine the myth viewed, whatever the scene represented. Writing came very appropriate to relieve from embarrassment the painter and his public. From t the 8 th century it was in current use; the habit was then adopted, of writing a name beside each person.[2] Did painters of frescos first take this method? We do not know; but always the painters of vases and sculptors did the same. Painting further remained much longer attached to this practice than did sculpture. If about the end of the 6 th century inscriptions of this kind are still read on the reliefs of the treasury of Cnidos,[1] there has been found no trace of them in the 5 th century on the friezes and pediments of the Temple of Zeus at Olympia, nor on the decorations of the edifices of the Acropolis of Athens. On the contrary, the name was inscribed beside nearly every person in the frescos of Polygnotus at Delphi. Pausanias noted where it was wanting.[2] On vases, the custom of these legends scattered on the field of the painting was retained for very much longer.[3]

Note 2.p.216. Pliny. (Latin).

Note 1.p.217. Histoire de l'Art. Vol.VIII,p.370-375.

Note 2.p.217. Pausanias. X.25-3. Pausanias also observes that certain things seem to be the invention of Polygnotus.

Note 3.p.217. The same desire to aid the spectator in the k knowledge of the subject suggested the use of the same explanatory inscriptions for the artisans that wove the tapestries of the 15 th and 16 th centuries of our era.

Of this birth and first progress of painting, the author followed by Pliny divided the honor between Sicyon and Corinth. While then Athens did not count, the industry of Corinth had

no rival other than Chalcis in European Greece; but what made the superiority of Corinth was, that as it appears, its workmen had directly received from Phoenician colonists formerly established on this site the secrets of more than one of the trades bordering on art. If Corinth must never have the glory of giving birth to an artist of genius, there was no city where the hand of the artisan should always remain more adroit, and more ready to follow taste in all its caprices.

As for Sicyon, it was situated too far from the sea to have attracted many strangers, and its industry had no past comparable to that of Corinth; but it was too near that powerful and industrious city, not to go there to seek models as well as the assistance op skilful and assured fingers. These advantages of proximity it profited by largely, especially when it was g governed by tyrants of the family of the Orthagorides, that rivaled in opulence and display the tyrants of Corinth. Even after those princes had disappeared, Sicyon continued to love a and cultivate arts and even had aims higher than Corinth; they succeeded better with Konachos and later with Lysippos in elevating it to great art.

In the vague memories retained of the first attempts of Greek painting, tradition gave to Sicyon a part as beautiful as that of Corinth. It is related that Craton of Sicyon, to give effect to his black outlines, imagined applying them on a ground of white chalk.[1] In the temple of Elis, believed to possess two paintings of Cleanthes, one was shown that was attributed to another Corinthian, Aregon; it represented Artemis seated on a griffin.[2] Pliny again mentions as authors of monochrome paintings, Hygiaenontes, Dinias and Charmadas;[3] but he knows neither where nor when they lived. It is probably that these names are those of artists that belonged to the same group of painters of Sicyon and of Corinth.

Note 1.p.218. Athenagoras. Legatio pro Christs. 14(p.59, edit. Bechair).

Note 2.p.218. Strabo. VIII, 343.

Note 3.p.218. Pliny. H-N- XXXV, 56.

The idea that accords in suggesting these evidences is, that for painting as for sculpture, the Peloponessus early had its school or rather its schools. We believe it possible to admit that Dorian sculpture in its infancy borrowed certain types

from the art of Egypt by the intermediary of Cretan sculptors;
[illegible]
not suffer the same influence. What tends to make it believed
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by lines traced with the point or left clear, that served to
[illegible]
and the movements of the dancers.

We are better informed concerning this Peloponnesian painting for the entire period of the beginning; but is it probable that for this entire time, the Eastern Greece had not attempted [illegible] lowed, we have seen the Ionians far distance the European Greeks. How can we suppose that they have not done so in their paintings, that marched at the same pace as architecture and sculpture? The history is lost of this Ionian painting; but its existence and importance are proved by some indications scattered in the writers. In Pliny is a mention of a painting of Boularchos representing a combat of the Magnetes against [illegible] the 8 th century by Candaules, king of Lydia. Herodotus relates that Mandrocles, the architect that constructed the bridge of boats thrown across the Bosphorus for Darius at the time of the expedition into Scythia in 506, had caused to be erected in memory of that event a painting, where was seen the great king seated on his throne on the shore, presiding over the march of his army across the strait.[2] The same historian relates that the Phocaeans, when they decided to abandon their city besieged by Harpagus (545), carried with them all the offerings in their temples, "save those of bronze, marble or painting."[3] [illegible] near painting;[4] there was current about him a little story [illegible]

from the art öf Egypt by the intermediary of Cretan sculptors;[4] it may then seem natural to ask if the growing painting did n not suffer the same influence. What tends to make it believed is, that this name of Philocles placed by Pliny at the head of the series of painters enumerated by him. The name is that of a Greek; but the accompanying epithet indicates a Greek, that after residing in Egypt, had returned to initiate his compatriots in the fashions of the profession learned at Sais or Memphis.

Note 4.p.218. Histoire de l'Art.Vol. VIII, p. 428-432.

Whether by the aid of Egypt or by the sole effort of several generations of artists, a sister and rival art to statuary was born and grew at Corinth and Sicyon in the course of the 7 th century. This was a black painting enhanced by red and crossed by lines traced with the point or left clear, that served to sketch the internal modeling of the figure, the attachments and the mowements of the members.

We are better informed concerning this Peloponessian painting for the entire period of the beginning; but is it probable that for this entire time, the Eastern Greece had not attempted the same art? Until now, on all the routes that we have followed, we have seen the Ionians far distance the European Greeks. How can we suppose that they have not done so in their p painting, that marched at the same pace as architecture and s sculpture? The history is lost of this Ionian painting; but i its existence and importance are proved by some indications s scattered in the writers. In Pliny is a mention of a painting of Boularchos representing a combat of the Magnetes abainst an unknown enemy.[1] This painting was acquired about the end of t the 8 th century by Candaules, king of Lydia. Herodotus relates that Mandrocles, the architect that constructed the bridge of boats thrown across the Bosphorus for Dárius at the time of t the expedition into Scythia in 506, had caused to be erected in memory of that event a painting, where was seen the great king seated on his throne on the shore, presiding over the march of his army across the strait.[2] The same historian relates that the Phoceans, when they decided to abandon their c city besieged by Harpagos (545), carried with them all the offerings in their temples,"save those of bronze, marble or paintings."[3] Saurias of Samos passed as one of the inventors of linear painting;[4] there was current about him a little story like

that of the young girl of Corinth, who traced a line on the w wall, the shadow cast in profile by her lover, thus furnishing the outline of the first relief.[5] Pausanias mentions a Calliphon of Samos, that he stated had represented in the temple of Artemis at Ephesus the battle for the vessels, an episode of the Iliad. He had personified Dispute with features much resembling those given to that figure by the sculptor of the coffer of Cypselos; it was the same repulsive appearance. [6] From the relation thus established, it is right to infer that Calliphon, who is named elsewhere, was an artist of the archaic age like Saurias. Samos then had workshops of sculpture from which came works distributed even to Attica;[1] it also had at that epoch its school of painting.

Note 1.p.219. Pliny. H.N. XXXV, 55.

Note 2.p.219. Herodotus. IV. 78. The historian twice employs in this connection the mean participle graphamenos and not the active participle graphas, which seems to indicate that in his mind, Mandrocles had ordered the painting and had painted it himself.

Note 3.p.219. Herodotus. I, 164.

Note 4.p.219. Athenagoras. Legatio pro Christo, 14) p.59, e edit. Delcair. There has recently been found in Egypt on a Greek papyrus lists of illustrious personages and of geographical names, which seems to have served to equip the memory of children. At the head of the list of celebrated painters appears a Semon Athenatos, otherwise unknown, to whom the text, much altered at that place, seems to attribute an initiative analogous to that of Saurias, the merit of having been first to outline on a white ground the shadow cast by a horse. (H. Diels, Laterculi alexandrini, p.6 in Apth. of Acad. of Berlin. 1904).

Note 5.p.219. Pliny. H.N. XXXV, 151.

Note 6.p.219. Pausanias. V. 19-1.

Note 1.p.220. Histoire de l'Art. Vol.VIII, p.287-298.

The few facts that we have thus recalled present no connection between them; they no less permit certain inferences that possess their interest. From evidences of Pliny and of Herodotus relating to Boularchos and to Mandrocles it results, that Ionia early knew of movable paintings. Pliny states that Candaules paid for the painting by Boularchos "its weight in gold," which could scarcely be understood except for a wooden panel.

the same impression is given by the text in which as a mention of Mandrocles; the latter having represented the passage of t [illegible] ians. Cleanthes and Aregon, appear rather to have been known from the manner in which the writers speak of them. Further, [illegible] Phocaeans at their excess were compelled to leave in the city [illegible] sily have found place aboard the vessels.

Note 2.p.220. (Greek).

Only by this diversity of methods employed does Ionian painting appear to be distinguished in the archaic age from that of the Peloponnesus; also by the nature of the subjects treated. Those indicated to us for some paintings of the oldest Ionian masters are all borrowed from mythology. It is probable that in the country in which was born the epic poetry, that it supplied the theme of more than one decorative fresco; but by the painting of Boularchos and by that of Mandrocles, we learn that [illegible] the final subjection by the Persians, painters had also commenced to inspire themselves by scenes of contemporaneous life, and that they had undertaken to retrace in their composition [illegible] speak, except that it seemed to be strongly interested in preserving the memory of the events of the national life, we are a little better informed on what then was passing at Athens. [illegible] initiative of a painter called Eumaros the Athenian.[1] An inscription recently discovered, that engraved on the base of the statue which Neartos had ordered from Antenor to dedicate it [illegible] name of his father seems to indicate, that the latter enjoyed a certain notoriety. It is then agreed to think that Eumaros [illegible]

the same impression is given by the text in which is a mention of Mandrocles; the latter having represented the passage of t the army, "consecrated," says Herodotus,"this painting in the Heraion of Samos," with an inscription in four verses.[2] On the contrary, the works attributed to very ancient artists of Corinth, Cleanthes and Aregon, appear rather to have been frescos from the manner in which the writers speak of them. Further, the Ionian cities also had their mural paintings. Herodotus alludes to them, where he enumerates the works of art that the Phoceans at their exodus were compelled to leave in the city that they abandoned. Images painted on little boards could easily have found place aboard the vessels.

Note 2.p.220. (Greek).

Only by this diversity of methods employed does Ionian painting appear to be distinguished in the archaic age from that of the Peloponessus; also by the nature of the subjects treated. Those indicated to us for some paintings of the oldest Dorian masters are all borrowed from mythology. It is probable that in the country in which was born the epic poetry, that it supplied the theme of more than one decorative fresco; but by the painting of Boularchos and by that of Mandrocles, we learn that in active and brilliant Ionia for three centuries preceding t the final subjection by the Persians, painters had also commenced to inspire themselves by scenes of contemporaneous life, and that they had undertaken to retrace in their compositions the most marked episodes. Thenceforth Ionia had its historical painting. If we know nothing of this Ionian painting, so to s speak, except that it seemed to be strongly interested in preserving the memory of the events of the national life, we are a little better informed on what then was passing at Athens. According to Pliny, decided progress was accomplished by the initiative of a painter called Eumaros the Athenian.[1] An inscription recently discovered, that engraved on the base of the statue which Nearchos had ordered from Antenor to dedicate it to Athena, gives Eumaros as the father of that sculptor.[2] It is known that in many families the practice of the arts was hereditary, and the care taken by Antenor to mention there the name of his father seems to indicate, that the latter enjoyed a certain notoriety. It is then agreed to think that Eumaros of the dedication and the Eumaros of Pliny was the same person.

According to its orthography and the form of the letters, the inscription seems to be of about 530 or 520, which would make Eumaros a contemporary of the last years of Pisistratus or of the first years of Hippias.

Note 1.p.221. Pliny. H.N. XXXV, 56.

Note 2.p.221. C.I.Att.IV. 1, 373[91]. The statue of Antenor is represented in Histoire de l'Art. Vol. VIII, Pl. II.

Here are two improvements in technics, whose honor belongs to Eumaros, according to Pliny:- "He was the first to distinguish men from women in his paintings, and also first not to fear to present his figures in all possible poses."[3] These brief and obscure expressions call for some explanations.

Note 3.p.221. Pliny. H.N. XXXV, 56. (Latin).

It could not enter into the mind of Pliny to affirm that in paintings preceding those of Eumares, the eye of the spectator was condemned not to know whether the persons represented were men or women. In the most formless images of the most ancient vases, for example on those of the Dipylon, women are recognized by the peculiarity of their costume, and by the projection of the breasts where the torso appears nude.[4] What Pliny meant is, that Eumares was first to distinguish the sexes by the tone of the flesh. Attic vases with black figures, works of potters that must be his contemporaries, show us the means employed to mark that distinction; they give us some idea of the appearance which those works must present. On the vases whose evidence we invoke, the nudes of male figures are of the same black as the clothing and accessories, while for the women the face and the neck, arms, hands and feet are white as snow.

Note 4.p.221. Histoire de l'Art. Vol.VII, Figs. 5, 6, 59.

Was Eumares the inventor of this convention, that had such rapid success? Did he himself perceive by observation, that t the woman passing a much greater part of her life in the shade of the apartments than the man was less sunburnt and less tanned by the wind than him, so that she was generally of lighter color? Or indeed is there a memory of Egyptian art? Many centuries before Eumares lived had they thought to paint in reddish brown the flesh of men, while they tinted pale yellow that of women.[1] This question of the spontaneous origin of the procedure or of its foreign source cannot be solved except by an affirmation based on proofs; but if one inclines to believe

that Egypt was for something in the system of coloring [illegible]

[illegible]

by the intermediary of Ionian artists. Athens of the [illegible]

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the Ionians were permanently established there, and the histo-
ry of architecture and especially that of sculpture had alread-
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civilization of the valley of the Nile.[2] Would painters alone
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the tone, as then passed from one sex to the other. Eumares
made a further step in that path. His merit would be to have
[illegible] bolder part, having substituted for that difference of
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Note 1. p.232. *Histoire de l'Art.* Vol. I. Pls. II, III.

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658, 651; Vol. VIII, 704-719.

Another advance is carried to the account of Cimon; he ga-
ve to the attitudes of his persons a variety that they did not
have with his predecessors. Doubt is not possible as to the s
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One can define it with precision by means of a text of Cicero
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No work of Eumares is mentioned to us; but the artist could
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the Athens of Pisistratus, where on the Acropolis as in the l
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for ample historical and religious compositions. Eumares formed
a school, for as his successor is given to us this Cimon of C
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painters of the 5 th century.[2] Here again is it necessary to
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if he has not sometimes badly understood the technical terms,
must he found in his Greek sources.

that Egypt was for something in the system of coloring then brought into fashion by Eumares, he can scarcely avoid suspencting that this influence made itself felt on Attic painters by the intermediary of Ionian artists. Athens of the commencing 6 th century had no commercial relations with Egypt, while the Ionians were permanently established there, and the history of architecture and especially that of sculpture had already shown the importance of the borrowings made from the ancient civilization of the valley of the Nile.[2] Would painters alone have not profited by this voyage and those visits? Seeing the sexes thus differentiated in the long series of many-colored images that covered the walls of tombs and temples in Egypt, they would have adopted the principle of this distinction, but perhaps contenting themselves also by reducing the strength of the tone, as then passed from one sex to the other. Eumares m made a further step in that path. His merit would be to have takena bolder part, having substituted for that difference of color the contrast of black and white.

Note 1.p.222. Histoire de l'Art. Vol. I. Pls. II, III.

Note 2.p.222. Histoire de l'Art. Vol. VII, p. 341-372, 654-656, 661; Vol. VIII, 704-719.

Another advance is carried to the account of Eumares: he gave to the attitudes of his persons a variety that they did not have with his predecessors. Doubt is not possible as to the s sense properly attached to the word "figura" in Pliny's phrase. One can define it with precision by means of a text of Cicero and the explanation of it given by the scholiast.[1]

Note 1.p.223. Cicero against Verres. II, 1, 21, 57.(Latin).

No work of Eumares is mentioned to us; but the artist could not have been embarrassed to find employment for his talent in the Athens of Pisistratus, where on the Acropolis as in the l lower city were built new edifices, while the old ones were enlarged as their decoration was renewed. Everywhere was space for ample historical and religious compositions. Eumares formed a school, for as his successor is given to us this Cimon of C Cleones, who appears to have been the precursor of the great painters of the 5 th century.[2] Here again is it necessary to criticize and interpret the assertions of Pliny. One can ask if he has not sometimes badly understood the technical terms, that he found in his Greek sources.

Note 2.p.223. Pliny. H.N.XXXV, 56.(Latin). Likewise Elien(H (Historiès variees, VIII, 8:- he says; "Until then only grew, being practised without art or taste, and like an infant at the breast, enveloped in swaddling clothes. Cimon led it to full growth." There must be some exaggerration; but the agreement of this evidence does not permit doubting the importance of the role that Cimon played in the development of this art. On Cimon, see Hartwig, Die Meisterschalen, the Chapter entitled:- Kimon von Kleonai und der Euphranische Kreis, p.154-166.

This question occurs concerning the first of the elogies that Pliny accords to Cimon. He says that the latter invented the catagrapha, and as he feared that the meaning of this word would escape the reader, he adds that this is an oblique image. For Pliny, this is a figure seen in profile. The same expression is employed by him in a passage in which the sense cannot be doubtful, where he relates that Apelles, having to make the portrait of Antigone, who was one-eyed, showed only half his face with the good eye.[3] Pliny seems then to suggest that Cimon was the firs to present his figures in profile; but in translating thus the Greek term, he gives the measure of his ignorance of the monuments. Among all peoples, the arts of design have always commenced by the profile view, where the line is much simpler and easier to seize than the front view. Pliny w would not have been mistaken in this, had he ever taken the t time to observe a relief or an archaic vase.

Note 3.p.223. Pliny. H.N. XXXV, 90.

What the author who inspired Pliny meant by catagramha must be what we call foreshortening.[1] The words "catagraphe" and " "catagraphon" were in current use to designate those projections of terrestrial relief on a plane, that according to various systems gave rise to geographical maps.[2] In those maps the irregularities of the ground are seen in perspective. It is t the same for the human body, when instead of representing it in elevation, as architects say, in the simplicity of the vertical position, the artist undertakes to show it as he sees it, leaning forward, back or to one side, in the complexity of a movement in which the torso bends in different ways and the bent members conceal a part to the eyes. A gloss of Hesychius attests that this term also was employed by the painters in the sense that we attribute to it here.[3]

[illegible]

... synonym of catagrapha, catatoma leaves no doubt of the meaning of the first term. Catatome is the section of a figure, seen as it presents itself when certain portions of the members or bust not being visible to the observer, seem to be cut off from ... and as if suppressed.

Because Cimon knew how to show his figures thus in perspective, he could "put more variety into the drawing of the f...," as Pliny says. In the image shown in profile, one could if necessary indicate the direction of the view by raising or inclining the head; but not without awkwardness could be indicated the movement of that head turning on the neck to look back; that is an attitude not capable of being rendered with some ...

[illegible]

A notable advance was this liberty of pose and the diversity that it comprised. This progress made itself felt in the entire rendering of the image. According to Pliny, Cimon always indicated with more clearness than his predecessors the articulations of the members and the projection of the veins beneath the skin. He applied himself with no less success in softness of the fabric, the lines of shadow, and the sinuous curves that are drawn on the surfaces of the drapery.

On the faith of an inscription, we have believed it possible to place Semeris about the middle of the 6 th century; but no literary or lapidary text informs us concerning the date properly assigned to Cimon. All that we know is, that he was later than Eumares. On the other hand, he is not mentioned as having collaborated in the great works of monumental painting ...

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Cratinos and of Nesiotes. Just as they gave the art of statuary to the point that it must reach to lead it to perfection, by the illustrious statuaries of the 5 th century, Cimon was the precursor of the masters of ... painting, of Polygnotus ...

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Pliny, ... [illegible]

Note 1.p.224. This was conjectured with some hesitation by Studnicza (Jahrb.1887.p.159) and confirmed by Holwerda (Jahrb. 1890, p.258).

Note 2.p.224. Thesaurus. 5. V.

Note 3.p.224. Under the word "catagraphe" etc. Given as a s synonym of catagraphe, catatome leaves no doubt of the meaning of the first term. Catatome is the section of a figure, such as it presents itself when certain portions of the members or bust not being visible to the observer, seem to be cut off from it and as if suppressed.

Because Cimon knew how to show his figures thus in perspective, he could "put more variety into the drawing of the face," as Pliny says. In the image shown in profile, one could if necessary indicate the direction of the view by raising or inclining the head; but how without awkwardness could be indicated the movement of that head turning on the neck to look backward? That is an attitude not capable of being rendered with some e ease, except in a three-quarter view, i.e., seen in perspective.

A notable advance was this liberty of pose and the diversity that it comprised. This progress made itself felt in the entire rendering of the image. According to Pliny, Cimon always indicated with more clearness than his predecessors the attachments of the members and the projection of the veins beneath t the skin. He applied himself with no less success in softness of the fabric, the lines of shadow, and the sinuous curves that were drawn on the surfaces of the drapery.

On the faith of an inscription, we have believed it possible to place Eumaris about the middle of the 6 th century; but no literary or lapidary text informs us concerning the date properly assigned to Cimon. All that we know is, that he was later than Eumares. On the other hand, he is not mentioned as having collaborated in the great works of monumental painting undertaken in all Greece after the Median wars. All then invites us to see in him a contemporary of Canachos, Ageladas, Antenor, Critios and of Nesiotes. Just as they pushed the art of sculpture to the point that it must reach to lead it to perfection, by the illustrious statuaries of the 5 th century, Cimon was the precursor of the masters of Attic painting, of Polygnotos and of Micon.

In Pliny, Cimon terminates the series of artists, that he

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pulos. To represent this art and carry it to the same height as sculpture, in the interval will be only the Attic school, that of Polygnotus, his collaborators and successors.

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[illegible] have been cited. All that can be proposed is to seek a [illegible] tion of those works in monuments of more modest charm, many of [illegible] [illegible] perished entirely; we wish to speak of many images that [illegible] [illegible] er to decorate a tomb or to preserve the memory of someone [illegible][1] [illegible] much from the injuries of time. The historian has no less the [illegible] will be studied in the chapter devoted to ceramics, this is [illegible] that remains of the ardor and success that sculpture has given in a translation to relief of the ideas and feelings of the Greek people.

Note 1.p.225. The first monument of this kind was brought to [illegible] [illegible] *Auts. Vol. I, p.40, Pl. I). It refers to the stele of Democra-* [illegible]

It is difficult to say if it was for reasons of economy or [illegible] that sometimes in Attica in the 6 th and the following centuries, there was substituted for the painted relief on the principal face of the stele, an image traced entirely by the [illegible] without the intervention of the chisel. The most ancient stel[e] of this type known is that, which preserved the memory of a [illegible] [illegible] came from the cemetery of Velanideza, from which also came the celebrated stele of Aristion.[2] It was deposited long since [illegible] [illegible]

presents ar the creators of Greek painting, a series to which he has admitted only one name foreign to the Peloponessus, that of the Athenian Eumaros. We must await the 4 th century to see a school of painting reappear at Sicyon with Eupompos and Pamphilos. To represent this art and carry it to the same height as sculpture, in the interval will be only the Attic school, that of Polygnotus, his collaborators and successors.

4. Monuments of Painting preserved.

Nothing remains of all the works by the artists, whose names have been cited. All that can be proposed is to seek a reflection of those works in monuments of more modest charm, some of which have owed to their very limited dimensions and to the material of which they were made, the advantage of not having p perished entirely; we wish to speak of many imiges that artisans more or less skilful have painted on marble or clan, either to decorate a tomb or to preserve the memory of homage rendered to the deity.[1] None of these monuments has not suffered much from the injuries of time. The historian has no less the duty of collecting these ruins. With the painted vases, which will be studied in the chapter devoted to ceramics, this is all that remains of the ardor and success that sculpture has given in a translation to relief of the ideas and feelings of the Greek people.

Note 1.p.225. The first monument of this kind was brought to the attention of archaeologists by Ludwig Ross, that excellent observer that has seen so well and has divined so much.(Arch. Aufs. Vol. I, p.40, Pl. I). It refrers to the stele of Democrateia. (Conze. Die Attischen Grabreliefs, No. 52).

It is diffucult to say if it was for reasons of economy or to diversify the appearance of a group of funerary monuments, that sometimes in Attica in the 6 th and the following centuries, there was substituted for the painted relief on the principal face of the stele, an image traced entirely by the brush without the intervention of the chisel. The most ancient stele of this type known is that, which preserved the memory of a citizen of Athens named Lynas:- (Greek).(Fig. 94).[1] This stele came from the cemetery of Velanidezza, from which also came the celebrated stele of Aristion.[2] It was deposited long since in the museum of Athens without anyone having distinguished a anything but the inscription on the base and some vague vesti-

vestiges of tints effaced, when the patient cleaning undertaken in 1878 by F. Thiersch caused to reappear, not the primitive colors vanished forever, but at least the yet very clear drawing of the image. Of color properly so calle, all that one can discern was a spot of reddish brown on the chest. Everywhere else the yellow tone of the ground, the more reddish and darker tone of the field comprised within the limits of the figure are not the remains of the ancient color; they only mark its place. This color must have been applied in a thinner layeron the ground than on the figure. What indicates this is, that t the ground is a little behind the image. Where the marble was protected by a thicker coating, it has resisted wear better. It is the same for the lines now found to enclose the figure and to mark its interior details; they project several times 0.04 inch. Account is taken of their persistence by what is divined in studying these marbles, of the procedure that the painter employed. He commenced by placing on the stele with a very fine point or chalk a very light sketch. He then colored the figure by giving the nudes and the various pieces of clothing and armor different tints; then pressing on the brush, he traced with the brush well filled with black, lines outlining the tones, that limited all contours with and outside. Like the other tones, the black finally faded; but being laid last, it remained longer; all passed into white, and it now projects in relief and light from the confused stains on the surface of the marble.

Note 1.p.226. Löschke. Altattische Grabstelen. (Athen. Mitt. 1879. p.36-41, Pl. I, II). Die Attischen Grabreliefs, No. 52).

Note 2.p.226. Histoire de l'Art. Vol. VIII, p. 73-82; 661, 664-666.

The entire field is filled by the effigy of Lyseas. The top of the head is wanting; but there remains the lower part of t the face and the pointed beard. Lyseas is standing and turned to the right. Both feet are shod with sandals and are placed flat on the ground. Over the long tunic that leaves the arms free, he wears the himation. The right hand falls and holds the cup with two ears, a cantharos, and the left is raised before the shoulder and carries a branch of boughs. A narrow fillet encloses the figure. Separated by this band from the principal image; between it and the plinth wider than the stele, a horseman gallops

to the right; he holds in hand a second horse, whose outline is indicated by a light line visible on the marble, but it is scarcely distinguished on the copies of it, that have been gi- [illegible] and horse have remained in reddish brown sufficiently clear, were formerly raised either on a blue ground or on the white- ness of the marble, only modified and removed by the ganosis, [illegible] contrary, for the image of Lysseas, one is inclined to think [illegible] red.[2] The tunic must be red, a warmer and lighter red than that of the ground. It is probable that the branches were painted green and the cup black, and also lamp-black or brownish black the beard and hair. The thongs of the sandals and the border [illegible] the shoes and the mantle. Perhaps the flesh had no tint other than that of the marble, passed over with wax. As for the man- [illegible] for days of festivals, and they would have been especially su- itable for Lysseas, if he fulfilled a sacerdotal function, as supposed from the attributes of the figure, the cup that serv- [illegible]

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If the idea be correct, that is thus formed of the appearance [illegible] preservation of that which about the same time tended to be in- troduced into the workshops of the decorators of vases; we [illegible] in the painting of red figures on black grounds, with black lines to indicate internal outlines and the play of the fabric; but what is more striking is, that one feels accented here in the rendering of the drapery, the advance where historians of give the honor to Cimon of Cleonae. The drapery no longer [illegible] on the stele the dryness and stiffness that characterizes it on vases with black figures. In what is perceived of the tunic behind the back, one notes the same effort as on the female s[illegible] linen cloth by the inflexions of light lines; but there is par- ticular reason to note the amplitude and elegance in which the

to the right; he holds in hand a second horse, whose outline is indicated by a light line visible on the marble, but it is scarcely distinguished on the copies of it, that have been given. It seems that this figure, where the bodies of the rider and horse have remained in reddish brown sufficiently clear, were formerly raised either on a blue ground or on the whiteness of the marble, only modified and removed by the ganosis, that preparation which we have described elsewhere.[1] On the c contrary, for the image of Lyseas, one is inclined to think t that it must have been detached in light on a ground of dark red.[2] The tunic must be red, a warmer and lighter red than that of the ground. It is probable that the branches were painted green and the cup black, and also in black or brownish black the beard and hair. The thongs of the sandals and the border of the mantle were certainly colored. Where there is doubt is for the nudes and the mantle. Perhaps the flesh had no tint other than that of the marble, passed over with wax. As for the mantle, it is asked if it was white or not.White clothing was thus for days of festivals, and they would have been especially suitable for Lyseas, if he fulfilled a saeerdotal function, as supposed from the attributes of the figure, the cup that served for the libation, and the branch of foliage.

Note 1.p.238. Histoire de l'Art. Vol.VIII, p.221-222.

Note 2.p.238. Löschke. Athen. Mitt. 1879. p.38-39.

If the idea be correct, that is thus formed of the appearance of the stele, such as it was when it left the hands of the workman, there would have been some analogy between this mode of presentation of that which about the same time tended to be introduced into the workshops of the decorators of vases; we mean the painting of red figures on black grounds, with black lines to indicate internal outlines and the play of the fabric; but what is more striking is, that one feels accented here in the rendering of the drapery, the advance where historians of give the honor to Cimon of Cleones. The drapery no longer has on the stele the dryness end stiffness that characterizes it on vases with black figures. In what is perceived of the tunic behind the back, one notes the same effort as on the female s statues of the Acropolis to imitate the little folds of the l linen cloth by the inflexions of light lines; but there is particular reason to note the amplitude and elegance in which the

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in tongues; but they stop at their lower ends in curves by w-
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ric. This is the character of the style that must especially
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at it is necessary to descend a little lower to the last years
of the principate of Pisistratus.

Lyseas must be an hipparch. The image of the cavalier gallop-
ing at the base of the stele is perhaps intended to recall the
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of those Panathenian festivals to which Pisistratus endeavored
[illegible].

To a stele similar to that of Lyseas must have belonged a
[illegible] [1] [illegible]
row white line outlines the face of a man from the top of the
hair to the beginning of the neck. The tint is lighter in the
nude parts of the face than in the masses of the hair; but he-
re as elsewhere, the different tones of red and white are all
the same colors that the painter has used; there are traces
that those colors have left on the stone, whose natural whiten-
ess they have changed more or less. It is proposed to attribu-
this image to the last years of the 6 th century.

[illegible] ..., Pl. XIV.

*On another stele possessed by the museum of Athens, the work
of decoration was divided between the chisel and the brush.* The
image of the deceased, only traces of which remain, was scul-
tured in relief; but below is painted the outline of a rider
passing to the right.[2] It rises in white on a red ground (Fig.
96). Within the outline enclosing thus this dark tone, some
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very summary fashion the forms of the rump of the horse, the
muscles and bones of its members; but the interior of the fi-
ge does not seem to have been colored.[3] What was there was a
fine half tint that gave to the Penthelican or Parian the light
touch, that on every careful work reduced a little the since
raw brilliancy. This technics is that of the vases with red
figures. Its principle is the same; it is that of figures tra-

folds of the mantle fall even to the bottom of the leg. The p panels of the himation do not terminate here in narrow aod th-in tongues: but they stop at their lower ends in curves by wh-ich one divines the consistence and thickness of a woolen fab-ric. This is the character of the style that must especially enter into the account to determine the approximate date prop-erly assigned to this monument. It has been proposed to seek this about the middle of the 6 th century. I fully believe th-at it is necessary to descend a little lower to the last years of the principate of Pisistratus.

Lyseas must be an Eupatrid. The image of the cavalier gallop-ing at the base of the stele is perhaps intended to recall the memory of some victory obtained in a horserace at a celebration of those Panathenian festivals to whimh Pisistratus endeavored to give such importance and fame.

To a stele similar to that of Lyseas must have belonged a f fragment found at Sunium (Fig. 95).[1] On a reddish ground a nar-row white line outlines the face of a man from the top of the hair to the beginning of the neck. The tint is lighter in the nude parts of the face than in the masses of the hair; but he-re as elsewhere, the different tones of red and white are not the same colors that the painter has used; there are traces t that tose colors have left on the stone, whose natural whiten-ess they have changed more or less. It is proposed to attribute this image to the last years of the 6 th century.

Note 1.p.229. Bull.Hell.Corr. 1884.p.459-461, Pl. XIV.

On another stele possessed by the museum of Athens, the work of decoration was divided between the chisel and the brush. The image of the deceased, only traces of which remain, was sculp-tured in relief; but below as painted the outline of a rider passing to the right.[2] It rises in white on a red ground (Fig. 96). Within the outline enclosing thus this dark tone, some other light lines draw the legs of the cavalier to indicate in very summary fashion the forms of the rump of the horse, the muscles and bones of its members; but the interior of the ima-ge does not seem to have been colored.[3] What was there was a fine half tint that gave to the Pentelican or Parian the light touch, that on every careful work reduced a little the slightly raw brilliancy. This technics is that of the vases with red f figures. Its principle is the same; it is that of figures res-

reserved in light on a dark ground.

Note 2.p.229. Attische Grabreliefs. I. Pl. IX, 2.

Note 3.p.229. Athen. Mitt. 1880. p.165, note 1.

The stele of Antiphanes furnishes a curious example of a type a little different.[1] The chisel only intervened to engrave the inscription, which alone recalls death. All decoration was executed with the brush, that of the elegant palmatium surmounting the cippus as that of the images which occupy the field. At the time of the discovery, one believed that there could be perceived a dog and a serpent below the inscription; but those indistinct appearances immediately vanished. What remains very visible on the upper part of the slab on a yellowish ground is a cock with a star represented behind his head. The two fillets that limit and divide the field are red. Around the volutes and on the leaves of the palmatium are white and blue. On the body and wings of the cock are very apparent traces of red and blue. The tail feathers appear to have been colored white; tail seems to be rounded and bent forward toward the neck of the bird. T The star was also white.

Note 1.p.230. Attische Grabreliefs. Pl. XIII; Histoire de l' Art. Vol. VIII, Fig. 339.

The museum of Athens also possesses the crown of another stele of the same type, on which the leaves of the palmatium were colored red.[1] Steles of this kind must have been numerous. Some strokes of hhe brush and the funerary slab had received its ornamentation. Sometimes this did not comprise figures. On one of those Attic steles is nothing but the decoration. The painter has placed there the image of the tomb itself, at the foot of the slab being a water vase and two of alabaster. Around t the neck of the hydria have been fastened little bands that h hang to the ground.[1]

Note 1.p.231. Attische Grabreliefs. Pl. XIV, 2.

Note 1.p.232. P. Wolters. Bemalte Grabstele aus Athen. (Jarh-Vol. XXIV, p. 2). The custom of thus giving the funerary slab a decoration executed with the brush was further not limited to Attica. On the upper part of a cippus found near Syracuse are two swans in full flight, detached in light on a dark ground, which must have been red or blue before the color faded. A sarcophagus of limestone found in the province of Caltonisetta is entirely covered by a very elegant painted decoration,

composed of dentils, eggs, frets, palmatiums and scrools; there are still distinguished white, blue and red.(Orsi in Notizie degli scavi, 5 th series, Vol. II, p.388, Fig. 6; p. 451,Fig.30.

To the same series are again connected two paintings executed by the same procedures, but for another purpose. One of them was on a marble disk 10.63 ins. wide, found in Attica.[2] The t two holes cut in the back of this disk must have been to receive pins, by means of which it was fixed against a surface, perhaps the wall of a temple. The face bearing the image had suffered much; it required careful attention to discern on the m marble what is less a figure than a shade of a figure. On a s seat with a very high back is seated a bearded personage with the head slightly inclined forward. Nothing of the under garment appears; but the mantle is cast on the right shoulder and falls behind the back and covers the lower part of the body; the chest and arm alone have remained free. The right hand is placed on the top of the thigh; one divines that the left arm was extended. On the field and near the border is this inscription:-(Greek).

Note 2.p.23a. Dragendorff. Zwei altattische Malereien auf M Marmor.(Jahrb. 1897. p. 1-8, Pl. I).

The long pointed beard, the seat of the line that represents the ground must have been painted black; no vestige of color is distinguished except on the knee, where it seems that the vestment was yellow ochre. By analogy with what has been observed elsewhere, a red ground is supposed.

The disk of Aeneas appears to be sensibly later than the stele of Lyreas. The folds of the pabric have more freedom there. The feet are no longer placed flat on the ground and the toes are better drawn. The face with its receding brow and aquiline nose perhaps had the character of a portrait in a certain measure. The form of the monument excluded all idea of a funerary destination. One can see there only a votive offering, either presented by the physician himself or by a grateful patient. There is proposed a date of 525 to 500.

Nor was it from a tomb that came a shield in marble of Paros, which the brush also concurred in decorating (Fig. 97).[1] It is recognized at once that the egis of Athena was chiseled in relief on the convex external surface; then on the internal surface were perceived some vestiges of color, and on the largest

of the two pieces, 0.06 ins. wide, after cleaning was distin- [illegible] a Nike that runs toward the left. Neither of the two arms is entirely preserved; but enough of them remains for one to follow the movement. The goddess seems to have as clothing only a mantle fastened on the right shoulder, leaving the left side of the chest uncovered. As frequently done on lecythes and on other vases with white glaze, the brush has outlined the clothed this torso with a tonic tinted gray or brown; but here remains of the color only some very faint traces of a brownish yellow on the wings and hair. Around them is distinguished a white stripe inserted for economy between the mass of the hair and the equally dark tone of the ground, as on the vase with the [illegible] lines that give the external contours, the hands sketching [illegible] breast and the folds of the mantle.

The shield had a diameter of about 25.0 ins. The figure of Nike did not fill its field. Before the goddess must have been an altar on which was poured the ritual libation. Did this shield belong to a statue of Athena, or was it merely a votive offering? We do not know; but we are less embarrassed to assign it an approximate date. It is later than the paintings so far described; there is in the entire movement of the figure and in the arrangement of the drapery that seems raised by the wind ease not found elsewhere; but the eye and the bust are still shown in face view, while the head is frankly presented in profile. [illegible] which closely followed them, are also seen certain entirely incoherences that coexist with an interpretation of form, that already show in parts a singular knowledge and skill.

Of the paintings on marble that we have mentioned, there scarcely remain more than the drawing on which was placed the colored image. It would thus seem natural for us to add to series a simple line drawing discovered by M. Paul Girard. In the too brief narration of excavations that he conducted in 18 on the site of the Heraeum of Samos, he found among the [illegible] (Fig. 45).[1] The stone decorated by it is of a grayish marble.

of the two pieces, 0.06 ins. wide, after cleaning was distinguished a figure, or rather a portion of a figure, the torso of a Nike that runs toward the left. Neither of the two arms is entirely preserved; but enough of them remains for one to seize the movement. The goddess seems to have as clothing only a mantle fastened on the right shoulder, leaving the left side of the chest uncovered. As frequently done on lecythes and on other vases with white glaze, the brush had doubtless clothed this torso with a tunic tinted gray or brown; but here remains of the color only some very faint traces of a brownish yellow on the wings and hair. Around them is distinguished a white stripe inserted for economy between the mass of the hair and the equally dark tone of the ground, as on the vase with red figures. All the coloring of the image and of the ground is effaced. The figure is no longer defined except by the black lines that give the external contours, the bands maintaining the hair, the curl falling behind the ear, the rounding of the breast and the folds of the mantle.

The shield had a diameter of about 23.6 ins. The figure of Nike did not fill its field. Before the goddess must have been an altar on which was poured the ritual libation. Had this shield belonged to a statue of Athena, or was it merely a votive offering? We do not know; but we are less embarrassed to assign it an approximate date. It is later than the paintings so far described; there is in the entire movement of the figure and in the arrangement of the drapery that seems raised by the wind, an ease not found elsewhere; but the eye and the bust are still shown in face view, while the head is frankly presented in profile. In the works contemporaneous with the Median wars, or w which closely followed them, are also seen certain entirely inaccuarcies that coexist with an interpretation of form, that already show in parts a singular knowledge and skill.

Of the paintings on marble that we have mentioned, there scarcely remain more than the drawing on which was placed the c colored image. It would then seem natural for us to add to this series a simple line drawing discovered by M. Paul Girard. In the too brief campaign of excavations that he conducted in 1879 on the site of the Heraion of Samos, he found among the rubbish in the interior of the temple the sketch reproduced opposite. (Fig. 98).[1] The stone decorated by it is of a grayish color.

The back surface was not cut, while the front surface was carefully polished and has no roughness except at the bottom, where the drawing stops. By the aid of a point was traced the profile occupying the middle of the stone. The line is light and indecisive at the ear and hair, on the contrary is deep where it indicates the nose, mouth, chin and neck. It seems indeed that the unknown author of this sketch desired to represent a woman; the line of the chest abruptly stops a little becow the neck, but extends enough to show a part of the bosom. The coiffure merits noting. Beneath the scattered hairs that conceal the brow, two nearly parallel lines lead one to believe that the artist first conceived his subject as coiffed by bands, a and then changing his mind, he conceived the temples ornamented by floating curls. A curved line continued behind the ear seems to mark the outline of a chignon that fell on the nape. No appearance of clothing nor of ornamentation." 1

Note 1.p.234. p. Girard. Note sur un dessin au trait de style archaique trouve dans l'isle de Samos.(Mons.Grecs.Vol.I,p.11-19.

Note 1.p.236. P. Girard, etc., p. 16. 1880.

M. Girard at first asked if there were under his eyes were not the remains of painting; but this hypothesis did not resist the examination of the stone. No trace of color on smooth parts or hollows. If there had been a painting it would be perceived today by the difference of the appearance of the field and the figure. "There is more. This sketch was never finished. T The upper part of the head was not even indicated; the body did not continue below the bosom. The tufa further presents a roughness there which would scarcely allow it to go lower. Are n not these the characteristics of a rapidly ou lined sketch without purpose by some idle painter, who worked on the decoration of the temple? Whatever it may be, this graceful sketch is the work of a true artist. If some inexperience appears in certain traits, for example if the ear is a little too large for the total height of the figure, all the front part of the face is treated with a sure hand and great freedom, denoting a profound knowledge of the rules of drawing as well as a remarkable ease. No trace of effort. A spiritual grace extends over the entire face; the uptorned nose, the opened mouth and the raised eyebrow, give a smiling aspect to the features, while the well developed and very firm curve of the chin retains for it an air

of naive gravity." [2] Archaic is no longer expressed [illegible]
[illegible]
[illegible] the first quarter of the 5 th
century shall we refer this charming work.
[illegible] . . . [illegible]

As men painted on marble, so they also painted on clay to m
multiply at small cost the votive offerings and to ornament
tombs. We possess a very great number of colored plaques, some
[illegible]
dence of the piety of the givers, while others ornamented the
walls of the tomb; there is also those sarcophaguses of terra
cotta, originally from Rhodes and especially from Clazomene.
[illegible]
fire charged with fixing the colors on the clay, these have
everywhere resisted better than those on stone; thus monume-
nts of this kind aid more efficiently than old and discolore
[illegible]
the works of those primitive Greeks, whose tendencies we hav
attempted to divine and to summarize their efforts.

The most ancient of these pieces of clay that have come to
us are those found in 1879 by a peasant of the hamlet of Pet
Skouphis, situated 1.75 miles southwest of Acrocorinth. No in-
formation could be obtained of the conditions of the discovery.
[illegible]
tios and the transportation to Athens. There were even thrown
on the market of antiquities more than a thousand fragments,
in which were recognized the remains of terra cotta plaques w
with holes for hanging and decorated by paintings.[1] Many of t
those plaques bore inscriptions. Some were painted on both si-
des; others were so on only one side. Most of those fragment
were very small, but some were of dimensions sufficiently lar
that the subject figured could be recognized and the inscrip-
entire
[illegible]
one these fragments. Into the museum of Berlin entered much t
[illegible]
culling these bits and fitting them together. By months of la-
[illegible]

Note 1.p.237. Rayet was then in Greece and was first to
ion these fragments and point out their interest.(Plaques
[illegible]

of naive gravity." [2] Archaism is no longer expressed here by the drawing of the eye, where in the profile the iris still retains all its roundness. To the first quarter of the 5 th century shall we refer this charming work.

Note 2.p.236. P. Girard, etc. p. 17, 1.

As men painted on marble, so they also painted on clay to m multiply at small cost the votive offeringr and to ornament tombs. We possess a very great number of colored plaques, some of which were placed in temples and their dependancies as evidence of the piety of the givers, while others ornamented the walls of the tomb; there is also those sarcophaguses of terra cotta, originally from Rhodes and especially from Clazomene, whose lids and sides were ornamented by the brush. Due to the fire charged with fixing the colors on the clay, these have everywhere resisted better than those on stone; thus monuments of this kind aid more efficiently than dim and discolored marbles in giving us an idea of the appearance presented by t the works of those primitive Greeks, whose tendencies we have attempted to divine and to summarize their efferts.

The most ancient of those plates of clay that have come to us are those found in 1879 by a peasant of the hamlet of Pende-Skouphia, situated 1.25 miles southwest of Acrocorinth. No information could be obtained of the conditions of the discovery. Secret were the excavations, the sale to a dealer of Nea-Corinthos and the transportation to Athens. There were even thrown on the market of antiquities more than a thousand fragments, in which were recognized the remains of terra cotta plaques w with holes for hanging and decorated by paintings.[1] Many of t those plaques bore inscriptions. Some were painted on both sides; others were so on only one side. Most of those fragments were very small, but some were of dimensions sufficiently large that the subject figured could be recognized and the inscriptions were intelligible; there were even found some entire plaques among these fragments. Into the museum of Berlin entered much t the greaterppart of this booty, men have not ceased to work in culling these bits and fitting them together. By months of patience, they have succeeded in restoring a great number of tablets.

Note 1.p.237. Rayet was then in Greece and was first to mention these fragments and point out their interest.(Plaques votive en terre cuite trouvees a Corinthe. (Gaz.Arch.1880.p.101-7.

[illegible]
[illegible]
par l'Association, etc. 1882. p.23-32;

[illegible]
tiated the most curious of the pieces so restored. See Antike
[illegible]
10, with a brief description for Vol. I by G. Hirschfeld, [illegible]
[illegible]
Vasensammlung in Antiquarium. 1885, Sect.IX, nos. 347-[illegible], p.
13-103. It is necessary to correct and complete the descriptio[n]
[illegible]
[illegible]
wängler and Left Zartin. (Der Korinthischen Pinakos im Antiqua-
rium der K. Museen. Jahrb. 1897. p. 9-48). In the Figs. [illegible]
[illegible]
tone of the image represents the red touches, that were laid
on the black in many Figs.

"The earth employed for the fabrication of these plaques is
the white unctuous clay of Corinthia. This clay was kneaded w
without being entirely freed from the small pebbles that it
contained, and was made into flat cakes from which were cut
with a knife pieces of nearly rectangular shape and of very
variable dimensions. Some must have been at least 7.9 by 11.
ins., while others were only 1.6 by 2.4 ins. The painted [illegible]
ect that decorates them is detached on a light yellow ground
and has a blackish red tone, sometimes accented by overlays
of violet red and of milky white; certain details have been
[illegible]
letters are painted in reddish black. Frequently a line of
the same color follows the border of the plaque and serves as
a frame of the composition." 1

Note 1.p.238. Rayet, etc. p.102.

[illegible]
ac- ex-votos, analogous to those that are seen figured on pai-
ntings of vases, sometimes suspended near a Hermes (Fig. 55),
sometimes carried by persons preparing to consecrate them.[2]
[illegible]
anathemas were placed in a temenos of Poseidon and of Amphi-
rite; they were later cast aside to give place to new ex-vo[tos]
The author of the find has thus found a sort of deposit of [illegible]

A little later, Collignon described those plaques that had been acquired By the museum of the Louvre.(Monumens grecs publies par l'Association, etc. 1882. p.23-52).

Note 2.p.237.As these restorations were made, there were published the most curious of the pieces so restored. See Antike Denkmäler. Vol. I, Pls. 7-8; Vol. II, pls. 23, 24, 29, 30, 39, 40, with a brief description for Vol. I by G. Hirschfeld, and for vol.II, by Pernice. Also see Furtwängler. Beschreibung der Vasensammlung in Antiquarium. 1885, Setc.IX, Nos. 347-955,p. 49-103.It is necessary to correct and complete the description of Furtwängler by the Article of Pernice published at the end of the general survey of the fragments, undertaken after Furtwängler had left Berlin. (Der Korinthischen Pinakas in Antiquarium der K. Museen. Jahrb. 1897. p. 9-48). In the Figs. That we mostly borrow from the plates of the Denkmäler, the gray t tone of the image represents the red touches, that were laid on the black in many Figs.

"The earth employed for the fabrication of these plaques is the white unctuous clay of Corinthia. This clay was kneaded w without being entirely freed from the small pebbles that it contained, and was made into flat cakes from which were cut with a knife pieces of rudely rectangular shape and of very variable dimensions. Some must have been at least 7.9 by 11.8 ins., while others were only 1.6 by 2.4 ins. The painted subject that decorates them is detached on a light yellow ground and has a blackish red tone, sometimes accented by overlays of violet red and of milky white; certain details have been indicated in incised li es. The inscrip ions in Corinthian letters are painted in reddish black. Frequently a line of the same color follows the border of the plaque and serves as a frame of the composition." [1]

Note 1.p.238. Rayet, etc. p.102.

"The purpose of these little monuments is not doubtful. They are ex-votos, analogous to those that are seen figured on paintings of vases, sometimes suspended near a Hermes (Fig. 99), sometimes carried by persons preparing to consecrate them.[2] Dedications traced with the brush permit the belief, that these anethemata were placed in a temenos of Poseidon and of Amphitrite; they were later cast aside to give place to new ex-votos. The author of the find had thus found a sort of deposit of dis-

[illegible]
remains of sacrifices; hence it is concluded that there was perhaps only a chapel and a sacred wood; to the trunks and branches [illegible]
[illegible]

[illegible]

[illegible]

[illegible] sailors, appear to have offered these very small tablets. [illegible] and goddess, residents in the sanctuary; but most of those [illegible] often accompany the image allude to the events of these couple existences.

[illegible] er and standing on a chariot (Fig. 100); behind was Hermes of whom is seen only the caduceus. Amphitrite has her head wrapped in a veil that falls on her shoulders. On another fragment, the head of the goddess is nude (Fig. 101). Elsewhere, Amphitrite sits on a throne and Poseidon stands before her. The drawing is almost always singularly awkward. However, here is a fragment on which the head of the same goddess presents a profile of better design (Fig. 102). A single tablet shows opposite Poseidon a male and bearded personage, who holds a scepter in his hand and can be no other than Zeus.

[illegible]

Poseidon appears alone on many plaques, clad in a tunic and draped in an ample mantle. He is bearded; a thick covering of hair hangs on his neck and back. He holds a crown in one hand [illegible][1] [illegible] issues his trident as if he wished to strike an enemy (Fig. 104). Finally, a curious representation is that of the god, who is mounted on a horse and holds in his hand another, [illegible]; [illegible] always armed with the trident (Fig. 105)[2] Is this Poseidon [illegible] which it is proper to recognize in the nude person of youthful appearance, that rides a marine monster (Fig. 106)? In his left hand is an object of elongated form, perhaps an alga, in the

discarded objects."3 He has not mentioned in that quarter any remains of edifices; hence it is concluded that there was perhaps only a chapel and a sacred wood; to the trunks and branches of the trees had been attached these tablets.

Note 2.p.238. O. Benndorf. Griechische und Sicilische Vasenbilder. p.9-14. Fig 99 is borrowed from there.

Note 3.p.238. Collignon. p.24.

Particularly unimportant persons, trade workmen, farmers and sailors, appear to have offered these very small tablets, whose price was certainly very low. Some of them represent the god and goddess, residents in the sanctuary; but most of those not adhering to this traditional them place in the scene the givers represented in their familiar occupations.The brief legends t that often accompany the image allude to the events of these humble existences.

The two grouped deities were sometimes shown beside each other and standing on a chariot (Fig. 100); behind was Hermes of whom is seen only the caduceus. Amphitrite has her head wrapped in a vail that falls on her shoulders. On another fragment, the head of the goddess is nude (Fig. 101). Elsewhere, Amphitrite sits on a throne and Poseidon stands before her. The drawing is almost always singularly awkward. However, here is a fragment on which the head of the same goddess presents a profile of better design (Fig. 102). A single tablet shows opposite Poseidon a male and bearded personage, who holds a sceptre in his hand and can be no other than Zeus.

Note 1.p.239. Jahrb. 1897. p.17, Fig. 6.

Poseidon appears alone on many plaques, clad in a tunic and draped in an ample mantle. He is bearded; . thick covering of hair hangs on his neck and back. He holds a crown in one hand and the trident in the other (Fig. 103).[1] Elsewhere he brandishes this trident as if he wished to strike an enemy (Fig. 104). Finally, a curious representation is that of the god, w who is mounted on a horse and holds in his hand another, whose outline is indicated by a great black line; he walks and is a always armed with the trident (Fig. 105)[2] Is this Poseidon and not rather one of the secondary deities that accompany him, w which it is proper to recognize in the nude person of youthful appearance, that rides a marine monster (Fig. 106)? In his left hand is an object of elongated form, perhaps an alga, in the

right he shakes the trident. Before him is a fish.[3]

Note 1.p.240. Denkmäler. Vol.II. Pl. XXX, 18.

Note 2.p.240. The same. Pl. XXIX, 3.

Note 3.p.240. Elsewhere a triton dances behind Poseidon, who gives place to Amphitrite. Pl. VII, 2.

The mariners of Corinth must hold the dirst rank among the devotees that frequent the sanctuary, and several inscriptions state the vows that they addressed to Poseidon and Amphitrite. Twice this prayer reappears there:- "Give us a happy departure."[4] At other times, the legend attests that the vows thus made have been granted." We arrive from Piraeus," is read on one of those plaques.[5] They loved to paint on the tablet the image of the boat that owed to that protection an early voyage (Fig. 107).[1] The vases here seen placed in a row on the upper part of the field, doubtless allude to the loading of the ship, to the pottery then furnished in such great quantity by the workshops of Corinth.

Note 4. p.240. Furtwängler. Nos. 946, 950.

Note 5.p.240. The same. No. 838.

Note 1.p.241. Denkmäler. Vol. II, Pl. XXIX, 12.

Without the goodwill of the god that raises and quiets the waves, Corinth could not have created this commerce in painted vases, that contributed so much to enrich it. As much as its sailors, its potters needed the favor of Poseidon and came to bring their homage. Thus are explained those tablets, where t the theme of the image is taken from the various labors in which were employed the workman fed by this industry. We shall find them elsewhere that we study Corinthian pottery.

Other art tradesare represented here. Here is a sculptor clad in a sort of short tights, who works in the execution of a statuette of a cavalier.(Fig. 108). He holds his chisel in the left hand, on which he prepares to strike with his right arm thrown back. On the field is a bird and a small person draped in an ample himation. Those must be figurines already finished and ready for sale. The country people no more neglect to honor the god, who aids them to export their grains and the fruit of their trees. Here is a vintage scene (Fig. 109). It is divided into two scenes: In the lower one is a trellis with its vines, leaves and grapes. A vintager detaches from it a bunch of graper, that he casts into a releiver in the form of a

skin bottle. Behind is another skin bottle, that a second worker seems to fill. In the upper scene are two persons, that might at first be taken for pugilists preparing for combat; but the fists are not closed, thumbs are raised, and the meaning of the gesture is expdained by a vase painting, on which a scene of the same kind, the gathering of olives, is more clearly represented by a skilful artist.[1] Those two peasants are the owners of the vineyard and rejoice at the rich harvest, that they point out to each other, or perhaps they count on their fingers the sacks that are carried away filled with grapes.

Note 1.p.242. Monum. dell' Inst. II, Pl. 446.

For the tablets reproduced or seen above, one understands or divines the feelings obeyed by the faithful, that have ordered or purchased them from the artisans that kept them in shops; but there are many plaques concerning which one cannot say why a certain subject is figured rather than another. Here is a h hunter (Fig. 110); clothed in a short red tunic belted at the waist, he holds two swords or two javelins; there is perceived the sheath of the sword suspended to his belt and the end of the quiver decorated by chevrons. Before him walks a dog, that raises his head toward his master with a movement well seized. Perhaps he goes to attack the wild boar in the brush; this beast is represented as pursued or wounded on two tablets.[1] Elsewhere must be hunters again, these two cavaliers armed with s spears, of whom one is at a walk (Fig. 111), while the other is at a full gallop. They pursue the hare as game, that is seen running beneath one horse. There are also warriors on foot; two hoplites are armed with spears and enter into furious combat; behind one of them as a spectator is a little personage draped in a himation.(Vignette at end of Chapter).[2] On one plaque where the colors are much effaced, several bearded men seem to engage in a wild dance.[3] Certain subjects are borrowed from mythology. There is Hercules in combat with the lion of Nemea and with the centaurs;[4] Hercules amusing himself with the Cecrops (Fig. 112). The hero here does not carry the two capitivs suspended by a bar placed on his shoulders, as on the metope of Selinonte.[5] He holds one of them in each hand by the foot; the dwarf has the head downward. There is also as on the painted vases a scene, that appears to be the plastic expression of an episode of the Iliad; the combat that occurred between

Aeneas and Pandaros on the one hand, Sthenelos and Diomedes on the other.[1] The painter had chosen the moment when Pandaros w was struck in the face by the spear of the son of Tydeus and fell to the ground. Aeneas has descended from his chariot and stands before Diomedes to try to defend from him the corpse and arms of his companion.(Fig. 113). Unfortunately there are but two fragments of that piece, leaving a large gap between them; but what remains of the incriptions permits the restorations of the entirety of the picture. To fill the field better, tha painter had added another to the persons mentioned by the poet. That is here the archer Teucer, who shoots his arrow when sheltered under the shield of Ajax. He is recognized by his pose; his identity is also certified by the two letters Te, v very clear before the fracture. The epic poem had thus supplied its part of the repertory of these image-makers. It has even been thought to find here a scene, that would be the most ancient possessed by us, an illustration of those old tales that came to us under cover of Esop, of the fox and the crow; but the elgend was badly read, utiliged by the author of that conjecture. The meaning properly attributed to what remains of t the painting remains very doubtful, being a fox beneath the branches of a great tree.[2]

Note 1.p.243. Denkmäler. Vol. I, Pl. VIII, 16ª 19ª

Note 2.p.243. The same. Pl. VIII, 9.

Note 3.p.243. The same. Pl. VIII, 14.

Note 4.p.243. The same. Pl. VIII, 7ª 7ᵇ

Note 5.p.243. Histoire de l'Art. Vol. VIII, Fig. 247.

Note 1.p.244. Iliad. Verses 274-310.

Note 2.p.244. Denkmäler. Vol. I, Pl. VIII, 2, Furtwängler. No. 784; Pernice (Jahrb.1897. p.33-35) opposes the proposed restoration by reasons that appear very worthy of attention; on it Furtwängler relies to justify his interpretation. The discoverg of a new fragment compels one to see in the two letters r o the first letters of the name of the giver. There is indeed a fox in what is restored of the plaque; but the crow is not seen there. It is al least proper to suspend judgment on it.

The image could not then have by its theme any relation to the culh of the mistress deities of the sanctuary. In the minds of the worshipper

of the worshippers of Poseidon and Amphitrite, what gave its propitiatory value to the offering was the fact of the consecration itself. The donor merited well from the god from the instant when he had dedicated any work of art, provided that it was deemed to have been executed for this god for homage and gift.

According to the form of the letters and the execution of the figures, men have agreed to date all these tablets from the 6 th century. Perhaps there is reason to be more precise. The series of which we have the remains under our eyes represents the gifts of several generations. If the writing is nearly the same everywhere, there are very sensible differences on t the style of the figures. To be convinced of this, it suffices to compare the two images of Amphitrite, one of which is unskilful and almost monstrous in heaviness (Fig. 101), while the other already attains a certain elegance (Fig. 102). It would be easy to point out other contrasts of the same kind, that if it be erroneous to explain by the originalitn alone in the merit of the artists. They were no others than those who labored to ornament by paintings of vases, that Corinth fabricated in thousands. The name of Timonidas is read on one of those plaques, that on which is seen a hunter accompanied by his dog.((Fig. 110). Now this painter was already known. his signature had been read on a vase with long neck found at Cleones and preserved in the museum of Athens.[1] Cleones was very near Corinth. There it can scarcely be longer doubted that Timonidas had his workshop at Corinth. Plaques and vases left the same workshops, and all progress made annually in the decoration of pottery made itself felt at the same times in that of the votive tablets. We scarcely recognize there one tablet on which the execution appears to announce the rapid and brilliant flight taken by the arts of design from about 550. We shall then attribute to the first part of the century nearly all the pieces composing this collection.

Note 1.p.245. Collignon and Couve. catalogue des vases etc. 1902. No. 620. Another plaque is signed by Milonidas (Wiener Vorlesungsblätter. 1888. Pl. 1). This painter's name has so far not been found on any vase.

What concurs in confirming this date is, that in several of those images is divined the imitation of models furnished by

Asia. Such is an entirely conventional lioness with rosette on the breast, which must have been taken from some rug imported from Chaldea or Lydia.[1] On a number of fragments is seen a bird that flies over the chariots, riders and footmen in the direction of their march (Fig. 111).[2] This bird takes no part in the action; it is there only to warn the spectator that the scene passes in the open air and beneath the sky. We have mentioned this motive on those bronze pateras and those silver cups, that Phoenician goldsmiths sold to Greeks and Italians.[3]

Note 1.p.246. Denkmäler. Vol. II, Pl. XXIV, 25.

Note 2.p.246. The same. Vol. I, Pl. VII, 3[b] 5; Vol. II, XXIII, 2[a] 18[b]

Note 3.p.246. Histoire de l'Art. Vol. III, p. 767,793; Figs. 543, 544, 548, 549.

The means of expression used by the decorator are those at the disposal of painting, according to Pliny, before the appearance of the artist of genius, that according to him, had just closed the period of long and slow apprenticeship. Here are f found those light lines intended to mark the internal details, whose invention is attributed to the first Corinthian-Sicyonian school; in many figures, most careful and doubtless the most recent, are found those red touches, an example of which was given by Ecphantos, and also that distinction of the sexes,marked by the contrast of black and white, that would be the act of Eumaros; but there is nothing here of the improvements, the honor of which reverts to Cimon of Cleones, according to Pliny, neither foreshortening, complication of poses, science of modeling forms, nor flexibility of drapery. This was at the moment when plastics made a decisive step, both in Ionia and European Greece, that all these monuments of the piety of the Corinthians and of their art, like old things out of fashion, were detached from the walls or trunks, that served them as supports and were buried in the trench that has restored them to us.

If the Corinthian tablets are curious by the diversity of t the scenes figured on them, and by what they allow to be divined of the processes and of the style of the most ancient painters of Corinth and of Sicyon, one feels himself in presence of works less archaic and more interesting, with a series of clay plaques with funerary representations, that have been collected in Attica and are now possessed by the museum of

Berlin.[1]

Note 1.p.248. Furtwängler. Beschreibung der Vasensammlung. Nos. 1811-1826. M. Collignon. Plaques furneraires de terre cuite peinte, trouveessa Athenes.(Gaz.Arch.1888,p.225-231). Antike Denkmäler. Vol. I. Pls. IX, X, XI, the last in color. The Notice accompanying those plates in Denkmäler has been resumed and developed by its author, G. Hirschfeld under the title:- Athenische Pinakes in Berliner museum, with a plate giving a hypothetical restoration of the whole and with a vignette. (Festschrift für Johannes Overbeck. 1893).

In 1872 were discovered at Athens not far from the Dipylon and its cemetery, fragments of terra cotta tablets, that were covered by paintings on one side. Those pieces were collected so as to restore at least some of the groups of figures. Those plaques appear to have been 12 in number. They present unusual dimensions, for they measure 14.6 ins. high and 16.9 ins wide, with a thickness varying from 0.98 to 1.18 ins. They have no hole for suspension. On certain fragments, the frets at the top of the field run to the right; on others to the left. From this contrast in the direction of the ornament it may be deduced that the plaques formed two distinct series. They were not suspended from a wall on nails. To take into account the position that they could occupy in the tomb, two conjectures have been proposed. It has been stated that these plaques might have made a part of one of those clay sarcophaguses, that we have already mentioned in speaking of Ionian cemeteries.[2] Or indeed they may be supposed to be set in the walls of a tomb analogous to those found and studied in Attica in the Mesogea, at Velanidezza and at Vourva.[3] This appears most probable to us.[4] Indeed nothing gives reason to think that the Athenians ever interred their dead in terra cotta vats; all known examples of t those vats come from Ionia, and further, none of those sarcophaguses is thus composed of separate pieces, which it would be necessary to assume to be joined together by a sort of cement; they are all made of two pieces, the coffer and the lid. Here are many difficulties, while in the other hypothesis, all is explained in the most natural manner. For those cubes of rubble or crude bricks that in the Attic cemeteries of the 6 th c century rose above the graves excavated in the earth and supp-

supported a stele, a sphynx or a statue, they required a decoration that should conceal the poverty of the construction. To obtain this, it sufficed to cover by a plastering four sides of the mass, and to fasten on the upper part of the exterior these colored plaques; they would have played there the part assigned to the frieze in the entablatures of the temples. This kind of ornamentation seems to have been much in fashion about that time. There is no reason to believe, that for tombs built at even the gates of Athens, were then adopted types other than those in long current use in the cemeteries of the rural districts.[1] The procedures of the painter are here in general the same as on the most careful and most recent Corinthian tablets. He employed three colors, a very dark black, a yellowish white and a brownish red tending to violet. He commenced by painting all his figures in black; on this black ground he then placed his white and red overlays. White served him to r represent the flesh of women and the covering of a horse, as well as to detach in light the palmatium decorating the foot of a bed. Red is employed in a very arbitrary manner. In figuring the clothing it alternates with black, cheering its monotony; it distinguishes the different parts and in places et s seems to recall only that the fabric of the mantle comprises bands of several colors. The details of the body and those of the drapery are indicated by incised lines. Finally, the personages are defined by inscriptions, some of which are traced by the brush and others are engraved by the point; even the hair and the mullets are designated by their names.(Pl. XII)[1].

Note 2.p.248. Collignon.p.235-236. On those sarcophaguses, see Histoire de l'Art. Vol.VIII, p.94, Fig. 60.

Note 3.p.248. On these tombs, see Histoire de l'Art. Vol. VIII, p.72-83, Figs. 44-48.

Note 4.p.248. Furtwängler is of this opinion. It is also the opinion of Hirschfeld, who likewise refers to the tombs of Mesogea.(Festschrift, p. 11-13).

Note 1.p.249. At a little distance from the place where were gathered our plaques were found tombs, that by their entire a arrangement much recall those of Mesogea; like them, the are built of crude bricks and most have been covered by plastering. (Deltion. 1891. p.20-23).

Note 1.p.250. The elements of Plate XII were borrowed from

Plate XI of Vol. II of Antike Denkmäler.

Each clay plate sufficed by itself; but there is a general theme, the same that we have already found on many vases of t the Dipylon, the representation of Attil funereal rites.[2] It has been attempted to find the order in which succeeded the different scenes, and to group the fragments according to that principle;[3] but ofe most clay tablets there remains too little for the attempt to be risked. The only certain argument is, that derived from the direction of the fret. The plaques formed two series, on which the persons marched in opposed directions: e each of them must be placed on one of the large or one of the small sides of the rectangular monument. Set side by side, the 12 plaques had an extent which approximately corresponded to the total extent of the zone given by the four faces of the t tomb of Vourva, which was 13.1 ft. long, 8.2 ft. wide and 4.9 ft high. The dimensions of the figures and the retouches which the legends seem to have received after setting in place, appear to indicate that these paintengs, made to be seen near, w were in reach of the eye and the hand.

Note 2.p.250. Histoire de l'Art. Vol. VII, Figs. 5,6,7,95.
Note 3.p.250. Festschrift. p.4-11, Pl. I.

With some doubts caused by the order it is proposed to establish, it can be followed for the convenience of the description. A procession of women marching toward the dwelling already entered by the dead, would fill the first plaque. The second would transport us into the interior of that house. There are 8 women, 5 seated and 3 standing.(Fig. 114). All exhibit by their attitude the gestures the grief that they feel. One of them is distinguished from the others by the place occupied about the middle of the panel, by the arrangement of her coiffure, and by the ample mantle placed over her head and enveloping t her entire form; it is divined that she is the oldest woman of the family, the grandmother. By the simplicity of their clothing and by the arrangement od their loosed hair hanging on their shoulders, the others announce themselves as inferior in dignity; these are sisters,relatives or servants. There is one at the right that holds a child in her arms; she holds it and is going to hand it to another of her companions; she prepares to join the procession of women (Plaque III), that advances to the bed on which is exposed the corpse. To Plaque IV belongs

a fragment which we have represented (Pl. XII). The [illegible] [illegible] centre. Unfortunately but two fragments of that picture have been found; yet they suffice to give an idea of the painting and of its general character. As a frame is a room, the principal chamber of the house; that is indicated by two very slender Doric columns, similar to those already found in the paintings of vases on which are figured beds, gymnasiums, fountains and palaces.[1] The last honors are rendered to a woman, doubtless to the mother of the infant, that we have seen in the arms of those charged with it. This woman lies on a bed with richly ornamented posts, itself placed on a sort of platform with three steps. Of the deceased, we have no more than the head resting on two pillows. Just as in the other representat- [illegible] the right. Around this head is a crown of leaves; on the breast are two necklaces. About the bed were grouped the nearest relatives, [illegible]. All that remains of those figures are the tops of the heads of the two persons, a man and a woman. The man has the hair [illegible] [illegible] nose appears to vary sensibly from the rather uniform type impressed in the other faces of men. This person of all those [illegible] on the top of the head, as if to tear the hair. The right arm is wanting. It was perhaps extended toward the dead, when the living addressed, as done in the laments of the Iliad and of modern Greece. Entirely similar is the gesture of the woman behind him, while with the left right arm she pulls the long tresses that hang before the ear or pretends to scratch her [illegible].

1.-- [illegible] Pl. 11, 15, 26, 34, 35, 42.

On succeeding plaques are the preparations of the procession [illegible] the heads, breasts and legs of two mules that are harnessed to it (fig. 115). Before these animals stands a woman and a [illegible] cast his mantle over his shoulders and appears nude. He holds

a fragment which we have represented (Pl. XII). The exposition forms the most important part of the whole; if was its moral centre. Unfortunately but two fragments of that plaque have b been found; yet they suffice to give an idea of the painting and of its general character. As a frame is a room, the principal chamber of the house; that is indicated by two very slender Doric columns, similar to those already found in the paintings of vases on which are figured baths, gymnasiums, fountains and palaces.[1] The last honors are rendered to a woman, doubtless to the mother of the infant, that we have seen in the arms of those charged with it. This woman lies on a bed with richly ornamented posts, itself placed on a sort of platform with three steps. Of the deceased, we have no more than the h head resting on two pillows. Just as in the other representations of this kind, the feet are at the left and the head at t the right. Around this head is a crown or leaves; on the neck are two necklaces, About the bed were grouped the nearest relatives, father, husband, brothers, sisters and sisters-in-law. All that remains of those figures are the tops of the bodies of the two pensons, a man and a woman. The man has the hair and beard cut short in token of mourning; the mouth is open as if to utter a cry of grief. His profile with a very aquiline nose appears to vary sensibly from the rather uniform type repeated in the other faces of men. This person of all those taking part in the obsequies, has the left arm raised and laid on the top of the head, as if to tear the hair. The right arm is wanting. It was perhaps extended toward the dead, whom the living addressed, as done in the laments of the Iliad and of modern Greece. Entirely similar is the gesture of the woman behind him, while with the bent right arm she pulls the thin tresses that hang before the ear or pretends to scratch her cheeks with her hands.

Note 1.p.252. Histoire de l'Art. Vol.VIII, Figs. 24, 31, 32, 33, 37, 38, 42.

On succeeding plaques are the preparations of the procession. Of the chariot that is to carry the corpse, there remains only the heads, breasts and legs of two mules that are harnessed to it (Fig. 115). Before these animals stands a woman and a man belonging to the team. To be freer in his movements, he has cast his mantle over his shoulders and appears nude. He holdsa

long and heavy staff fixed by one end between the breasts of the mules, and which serves to support either the pole or the rear of the chariot, when the march is interrupted, so as to relieve the animals and prevent the collar from loading their shoulders.

Before the hearse is already formed the funeral procession. Persons on foot and on horses are arranged in beautiful order, but of all this part of the work are now only very slight remains. Here is a fragment on which are seen four male figures in the attitude of waiting; only their heads and torsos are p preserved. One of those persons is beardless. Three of them a are seen in profile, but one showing his front.(Fig. 116).

On four plaques (IX-XII), the painter represented this file of cars that already has its place marked in the funeral rites on the vases of the Dipylon. One is able to count four different teams. To aid the eye in recognizing among the multiplicity of all these bodies and all these legs, the third horse in depth is painted white (Fig. 117). Behind each quadriga march men and women, who make the same gesture as the mourners grouped around the bed.

The composition then has its unity. All the scenes figured there correspond to the moment, when leaving the house in which it gathered around the orphan, the funeral procession is to m move after the body of the young mother has been placed on the car to be taken to the family tomb, the birth of her son having cost her life.

Doubtless in the execution of the figures is still here convention and some awkwardness. Nothing is more arbitrary than the method taken by the painter to trace the eye, everywhere presented in front on faces in profile. For the men this eye is nearly as round as a circle; on women's heads it elongates in almond shape. Also entirely conventional is the contrast of the tones that distinguishes male from female flesh. The very small infant of the scene of the interior is only a doll with badly attached members (Fig. 118). Like our mediaeval art, Grecian art only came very late to reproduce successfully the delicacy of the still uncertain forms of infancy. There is also some unskilfulness in the confusion of the bodies and legs of the horses; a white leg of the third horse projects from the black leg of the second.(Fig. 118).

With these inaccuracies, the drawing is nearly true and firm, even with a certain elegance in the rendering of the hands and feet; but its principal merit is, that the movement is seized there with singular justice, that even in places gives it a very impressive character. For Example, see this head of a man in which is divined that o the member of the family most particularly affected by the stroke that death has just struck; (Pl. XII);also see this woman that appears to us was the mother of the dead (Fig. 119). In the long veils in which she is draped and especially in her entire pose, in that hand which she brings to her chin and the other that she lets fall on her knees with a gesture of abandonment, what an air of discouragement, of thoughtful and concentrated grief!,The painter has p proposed to express certain feelings and has succeeded in this. He has known how to put varietw into the attitudes and grouping of his persons, while accepting the traditional data comprised in these representations. Finally, nowhere does he make proof of more skill than in his figures of animals. The horses have fine heads and full forms, aud their legs are dry and nervous. It is the same for the mules, of whom we have scarcely more t than the heads; but they have indeed the form and appearance that characterize that species (Fig. 120); they are distinguished at first sight from heads of horses.

The drawing is here more free and firm than in even the more recent Corinthian tablets. Yet it is possible that those were scarcely older than the Attic plaques. The rich Eupatrid who decorated this tomb of his wife could order the ornamentation from Eumares or some one of his pupils, while the tablets suspended within the enclosure of Poseidon and Amphitrite were nearly all purchased for a few three cent pieces from painters at a reduced price, ordinary dealers for a public of peasants and sailors.[1] Art was further more advanced in the 6 th century in the Athens of Pisistratus than in that industrious Çorinth, where no artist of the first order gave the example of fertile initiatives.

Note 1.p.255. Of those artisans, Isocrates disdainfully said, that one could not dream of their cultivating the same art as Zeuxis or Parrhasios, no more than he could assimilate a coroplath or maker of terra cotta figurines to the Phidias, who sculptured the image of Athena (On Antidosis, 2).

To the same series belongs another plaque now in the Louvre, that was found on the southern coast of Attica (Fig. 118). It must also have been the ornament of a tomb.[2] The processes of the execution are the same as on the tablets described above. The figures are black with incised lines, and with white overlays for the flesh of the women and for some accessories. In places are violet touches.

Note 2.p.2.5. Benndorf. Griechische und Sikelische Vasenbilder. p.3-17, Pl. I. A. Dumont. Les ceramiques de la Grece propre. Vol. II, p.10-15. For the inscriptions, see Benndorf.

What is represented is a scene of exposition. While rendering the movement with expressive justice, the drawing is more neglected here than on the plaques of Athens; it was traced by a hand less sure, which gives to the entirety a more archaic air. What is peculiar to that tablet is the multiplicity of the inscriptions; they define the character and a role of nearly every personage. The deceased was probably unmarried. The mother Meter as the nearest relative holds in her hands the head of the cherished dead, and gives the signal for the lament, as did the spouse Andromache in the mourning around the funeral bed of Hector at the end of the Iliad.[1] Also drawn in the same manner are the sister, brother, father and the two grandmothers, a mourner, etc. Twice appears the interjection alas (oimoi)! There remain one or two legends that have been variously explained. The letters "lolytos" read beneath the couch itself seem to belong to a word derived from the verb "Ololy%0, olytto," to groan. The general title of the painting would then be:- The Lamentation.[2]

Note 1.p.256. Iliad. XXIV, 723. (Greek).

Note 2.p.256. Besides the plaque found at cape Colias, the Louvre also possesses two other painted tablets representing the funerary exposition. One of them is almost complete; but the execution is not very careful. The flesh of the woman there is not painted white.

The museums of Athens and of Copenhagen contain many fragments of other plaques of the same kind.[3] They indicate even by their number how much in the fashiou was this sort of decoration in the 6 th century in the funerary architecture. Other fragments found in Attica attest that the habit of consecrating painted tablets in the temples was no less extended at Athens

than among the Corinthians. Three of them are the fragments of a painting representing the apotheosis of Hercules.[4] On one is the head and torso of the hero and of . young driver Iolaos. The names of these two personages are inscribed on the field. (Fig. 120). Without yet being freed from archaic conventions, the drawing here has breadth and freedom. This is striking especially on the bit on which are preserved the head and neck of the horses harnessed to the chariot (Fig. 121).

Note 3.p.256. Benndorf. Griechische und Sikelische Vasen.Pl.II.

Note 4.p.256. The same. Pl. III.

Like the preceding, another plaque came from the Acropolis, and doubtless was exposed there in the enclosure of the old t temple of Athena. There was seen the goddess mounting on her chariot (Fig. 121), Hermes standing before her with the caduceus in hand. The painter that executed this picture was sufficiently satisfied by it to sign it. There is a singular resemblance between this painting and a certain votive relief of Athens, on which we have indicated a naive seeking for grace.[1] Same trace of the profile with a very long and very pointed n nose, with a chin receding from the lip; same arrangement of thin and serrate lines that show the folds of the drapery. The use of these plaques did not cease with the 6 th century; there are fragments of several tiles on which the figures are detached in light on a black ground.

Note 1.p.258. Histoire de l'Art. Vol. VIII, Fig. 314.

Note 2.p.258. Benndorf, Griechische und Sikilische Vasen. Pl. IV, 2; V, 3. The fragments of several of these plaques, reliefs painted in vivid colors, were published by Miss Hutton. They represent Athena under various aspects, Athena Ergame spinning from her distaff, or Athena Promachos springing on her chariot. (Jour. Hell. Studies. 1897. p.30--318. Pls. VI, VII).

We shall not pass the limits that we have imposed on ourselves in studying a painting on clay found on the Acropolis in 1885, that represents a young warrior armed with the spear in the act of combat (Pl. XIII).[1] It appears to date from the first years of the 5 th centurw. The form of the helmet and the figure of the satyr that ornaments the shield recall the manner of the painters Nicosthenes, Pamphaios and Kachylion, with whom about this time commenced the vases with red figures.

The appearance here is quite different from that on the mon-

monuments described above. This is no longer a thin plaque, m made to be inserted in a wall like a frieze, or to be suspended against its surface. Here is a real brick, of which further remains little more than half. This brick is 2.4 ins. thick, 20.5 ins wide and 15.4 ins. high in its present state. When it was intact, the total height must have been about 27.6 ins. The upper edge of this panel is ornamented by an interlating painted red and black; it was therefore visible. The inscriptions were not deciphered without difficulty, but do not aid us in divining where this brick was placed. There is here one of those praises that are so frequently found on painted vases. The word "calos" is read at the right of the head of the soldier; but at the left is a confusion of letters in which the eye loses itself at the first moment. It has finally been recognized; a certain Megacles at first benefited by the epithet calos; then his name was effaced to give place to that of Glaukythes. We are ignorant, both of who these persons were and w why this substitution was made.

Note 1.p.259. O. Benndorf. (Ephemeris. 1887. p.115-130, Pl. VI). Our plate XIII reproduces the plate of the Ephemeris.

The face of the brick exposed to view had received a coating of white laid lightly on the yellow, with two bands on the field, one black and the other red, enclosing the figure. For t that the painter employed besides the white forming the ground only two other colors, black and red ochre. With this red are painted the nudes on the body of the young man, while the drapery around the loins and falling behind his thighs is frankly black. The dancing satyr that decorates the shield is also nude; but his body is colored black; his long tail is red, darker t than the skin of the soldier. A black line outlines all the c contours. In the interior of the figures are indicated the details of the cuscles or the folds of the drapery on the red by fine black lines, on the black by light incised lines that allow the white of the ground to appear. Also in white have beem reserved the eyeball, the interior of the orb of the shield, the bell and crest of the helmet.

If it be necessary for us to renounce the knowledge of what entirety this painting made a part, there are other paintings, perhaps a little earlier, where the technics is sensibly similar, and whose purpose is indicated by even the circumstances

of the discovery. These are clay plaques on each being painted one, two or three figures; they were collected in the rubbish of the very curious old temple recently uncovered and studied at Thermos in Etolia.[1] Wood and terra cotta still played there a very great part in the construction and decoration; it is o one of the most recent monuments in which we can study the methods of rising Doric architecture. At latest, it dates from the first half of the 6 th century, and what has been found there in sculpture announces the influence of the style of the Peleponessian school.[1] It is not doubtful that the plaques of Thermos had a function of metopes in the external frieze; they must have been inserted in triglyphs of wood. Most of them were broken into vern small pieces. Yet 5 have been restored, if not completely, at least so as to show the general arrangement.

Note 1.p.2_0. Sotiriades. Ephemeris. 1901. p.72-96, Pls. II-VI. In Revue arch. (1900, p. 312-315) was given a summary of the description of the excavations of Sotiriades.
2

Each image was enclosed by a double border, a red band concealed in full or in part by a wooden frame, and a band of darker red on which are detached a row of white disks or rosettes. This white is that of the ground and is of a creamy tone, a d darker white serving to represent the flesh of the women. That of the men is a rose color. On the clothing and accessoroes , the purple of the internal embroidery is near the black. In o one painting, the foot of a seat is painted yellow.

Here the subjects noted on the 5 plaques that could be restored:- 1. the mask of the Gorgon. The tongue hangs between two rows of enormous teeth. From the chin springs a beard falling in great locks, alternately red and black.

2. A hunter carrying a boar and a deer, hung on a bar laid over his shoulders. His left hand aids in supporting the bar. His right hand holds the bow. He is clothed in a short tunic held to his waist by a girdle, leaving his arms and legs nude, from the middle of the thigh. The neck, sleeves and bottom of the tunic are ornamented by chevrons, interlacings and rosettes, representing embroideries of the fabric.

3. Perseus with wings on his heels flees from the Gorgons. Covered by a pointed cap, he is clothed in the same short tunic as the hunter, and that is decorated in the same fashion. In a basket placed beneath his right arm, he carries the head of

Medusa.

4. Two women are starding, bodies clad in long tunics leaving the arms bare, lean toward each other and appear to talk. There must be a smaller person between them; but a large part of the plaque is lacking there. The hair is held up in front by a band, with heavy tresses on the back and chest. Behind the two women were inscribed their names. Only that on the right is now read, Xelidon, the swallow. Was this the story of Philomele and of Procne taken as a scene, and can there be assumed the corpse of the infant Itys between the two women? Had the left inscription remained legible, doubtless the meaning would be known. It is difficult to determine in the actual condition of the monument.

5. A last plaque is still more mutilated. It represents three persons seated side by side on a wide throne with massive feet. Two of the three heads have disappeared, but these can only be deities. We are so informed by even the pose of the figures, the breadth of the seat occupied, and especially by the richness of the clothing that they wear. Those are covered by complicated designs, chevrons and palmatiums, rosettes and frets. There are bands on which are seen griffins facing each other at right and left of a cratera. These squares on which alternate the image of the griffin on a red ground, with the symbol of the thunderbolt on a black ground. It is known that the Temple was consecrated to Apollo. It is then natural to recognize in the three deities so associated, Apollo, Artemis and Latona. The only head remaining is that of a woman.

The conventions at Thermos do not differ from those noted in the Attic paintings on clay; but the contour is here marked by a black line, but has not the same decision. The brush of the Etolian artist has omitted to indicate by lighter lines in the interior of the figures the projections of the great muscles and the play of the joints. The movement is seized with a certain accuracy; but the drawing lacks accent. I do not know whether these metopes are more ancient than the friezes decorating the tombs of the Athenian Eupatrids; but then belong to an art less in the path of progress. What particularly forms the interest is that the technics is distinguished from that of painted vases, better than in other contemporaneous paintings.

here are no lines incised in the black, and the brush has [illegible] used violet touches, that on Corinthian coffers frequently [illegible] to have only been scattered over the field to amuse the eye of the spectator. Everywhere are uniform tones, each of which is employed for the part of the image where its presence seems best justified. The general appearance more nearly approaches [illegible]

We are again aided in dividing what, in the course of the [illegible] [illegible] tion of the sarcophagues of Clazomene. There have been found elsewhere, for example at Samos, terra cotta coffers that served for the interment of the dead; but on none of these coffins is the least trace of painting. The method of their ornamentation in color appears to have been peculiar to the city of Clazomene.[1] It is true that the British Museum possesses a sarcophagus so emcellished, that it acquired as coming from Camirus, but there are serious reasons for doubting the correctness of that information.[2] [illegible] all points to those collected at Clazomene, there is no means of separating or distinguishing them. All European museums [illegible] preserved; recently have been counted and described as many as [illegible][2] We do not propose here to study their technics; the question will be proposed later in regard to those vases of R[illegible] and of other workshops of Asiatic Greece, to which the said sarcophagues are closely related, in all the ornament and the mode of fabrication. For the moment, we shall limit ourselves to seeking if it be not possible to recognize in many scenes represented on the lids, on the flat sides and in the in[illegible] of the clay coffers, many themes that ceramic painters borrowed from those masters of Ionian painting, such as Bularchus of Samos and Eucharidas, only known to us by the mentions scattered in the writers of antiquity.

Note 1. [illegible]

Note 2.p.268. The discovery of the sarcophagus is not easily [illegible]

the Museum, nor in those of Salzmann, who excavated with Bi[illegible] No excavator that has explored the cemeteries of the island of Rhodes has ever found anything similar. As supposed by [illegible] Biliotti to augment the price of the collection of antiquit[illegible]

Here are no lines incised in the black, and the brush has less used violet touches, that on Corinthian pottern frequently seem to have only been scattered over the field to amuse the eye of the spectator. Everywhere are uniform tones, each of which is employed for the part of the image where its presence seems b best justified. The general appearance more nearly approaches that which must have been presented by the contemporaneous frescos

We are again aided in divining what, in the course of the archaic age might be historical painting, by examining the decoration of the sarcophaguses of Clazomene. There have been found elsewhere, for example at Samos, terra cotta coffers that served for the interment of the dead; but on none of these coffins is the least trace of painting. The method of that ornamentation in color appears to have been peculiar to the city of Clazomene.[1] It is true that the British Museum possesses a sarcophagus so embellished, that it acquired as coming from Camiros; but there are serious reasons for doubting the correctness of that information.[2] This sarcophagus being further similar in all points to those collected at Clazomene, there is no means of separating or distinguishing them. All European museums now possess examples of those curious monuments more or less well preserved; recently have been counted and described as many as 26.[3] We do not propose here to study their technics; the question will be proposed later in regard to those vases of Rhodes and of other workshops of Asian Greece, to which the said sarcophaguses are closely related, in all the ornament and the mode of fabrication. For the moment, we shall limit ourselves to seeking if it be not possible to recognize in many scenes represented on the lids, on the flat sides and in the interior of the clay coffers, many themes that ceramic painters borrowed from those masters of Ionian painting, such as Saurias of Samos and Boularchos, only known to us by bried mentions scattered in the writers of antiquity.

Note 1.p.263. Histoire de l'Art. Vol.VII,p.92-94. Fig. 60.

Note 2.p.263. The discovery of the sarcophagus is not mentioned in the notes of the dealer, Bilotti, in the possession of the museum, nor in those of Salzmann, who excavated with him. No excavator that has explored the cemeteries of the island of Rhodes has ever found anything similar. As supposed by Joubin, Bilotti to augment the price of the collection of antiquities

that he sold to the museum, added thereto this object purchased from some dealer in Smyrna or Rhodes, who had acquired it at Vourla on the gulf of Smyrna near the site of the former Clazomene.

Note 3.p.2_3. The entire question of these sarcophaguses has been treated with a very accurate knowledge of the monuments and with much method in the Latin thesis of Andre Joubin. De Clazomanis sarcophagis. 1901. We refer to that Memoir for the list and classification of the monuments, and for the indication of the different collections in which they have been published and studied. Some additions are to be made today to the list drawn up by Joubin. Thus a new sarcophagus has been acquired by the museum of Berlin, figured in Antike Denkmäler. Vol. II, Pl. 58, and described by M. Zahn (Jahrb.Vol. XXIII. 1908. p. 169-180).

The so-called sarcophagus of Camiros will serve to give an idea of the process of execution.[4] This is not one of the most ancient known, but if we place it in the first line, this is because of the relative sobriety of its decoration, whose character is seized at first sight better than where it is more c complex; this is also because of the better preservation of the monument.

Note 4.p.263.A.S.Murray. Terra cotta sarcophagi, Greek and Etruscan in the British Museum. 1898.

These sarcophaguses are enormous coffers with lengths varying from 6.6 to 7.5 ft.[1] They were moulded and made in two pieces, the coffer and the lid. The latter being nearer the surface of the ground than the coffer that it covered, more exposed to t the shock of the plow in a land whose culture was never interrupted, has nearly always disappeared. A single lid has come to us intact, that of the beautiful sarcophagus preserved in London. The clay of which the coffers is made is quite coarse; but in places where it must be decorated, it received a coating of finer red clay dissolved in water; then the surfaces so prepared were carefully polished, and finally covered by a white coating on which the the ornamental designs and figures were set off. Two methods of execution were employed for this, the method of the entirely opague image as on most vases with black figures, and that of the transparent outline, reserved whites, where the external contour and internal details are indicated

by lines traced with the fine point of the brush. The two [illegible]
one are sometimes applied together in the same figure. [illegible]
[illegible] (fig. 22).
bodies of animals occupying the bottom of the ground are [illegible]
ed as opaque figures and the heads are in transparent [illegible].
Elsewhere in two busts that face each other on the border of [illegible]
depression, the face and neck on that border are only [illegible]
outlines, while the hair is represented by touches of color, Pl.
XV. In the rests thus colored flat, sometimes the white ground
is spared, which gives certain effects; thus on the body of [illegible]
[illegible]
[illegible]
on the color; thus is marked the joint of the shoulder of the
two [illegible]. Elsewhere are found incised lines. Before placing the
[illegible]
composition. He took that precaution for all the figures of
any importance.

To fill the outlines thus described on the clay, the painter
seems to have used everywhere the same coloring material; but
this has given quite different tones from one sarcophagus to
[illegible]
ers, and from one corner of the coffer to the other. Here is
found a reddish brown that is almost black in places (Pl. XV).
Elsewhere the red is very frank. By the action of the fire a[illegible]
[illegible]
ure was subjected by the fire more or less strong, it has cha[illegible]
ged from black to red. The burning of such enormous masses
could not be everywhere uniform, in spite of the skill of the
workmen. Some parts were calcined. On the ground tone, the [illegible]
[illegible]
[illegible] for the bodies of the horses, the arms of the warrior[illegible]
[illegible]
its grounds and for touches with the brush, that rendered [illegible]
service required of lines engraved with the point on [illegible]
black figures.

A theme that constantly reappears on these coffins is one [illegible]
those that Greek art took from oriental art, and that it [illegible]
most faithfully transcribed, the group formed by two [illegible]
ing on each other's backs, or by two of these animals [illegible]
menacing or devouring a beast, stag, goat or bull (fig. [illegible]

by lines traced with the fine point of the brush. The two methods are sometimes applied together in the same figures. We have several examples of this in these sarcophaguses (Fig. 122). The bodies of animals occupying the bottom of the ground are painted as opaque figures and the heads are in transparent figures. Elsewhere in two busts that face each other on the border of a depression, the face and neck on that border are only line drawings, while the hair is represented by touches of color, Pl. XV. In the parts thus colored flat, sometimes the white ground is spared, which gives certain effects; thus on the body of the bull this represents spots on his skin. Elsewhere the modeling of the form is recalled by white lines that the brush has laid on the color; thus is marked the joint of the shoulder of the two lions. Nowhere are found incised lines. Before placing the color, the painter traced on the moist clay the sketch of his composition. He took that precaution for all the figures of any importance.

To fill the outlines thus inscribed on the clay, the painter seems to have used everywhere the same coloring material; but this has given quite different tones from one sarcophagus to another, and often from the top to the base of the same sarcophagus, and from one border of the coffer to the other. Here is found a reddish brown that is almost black in places (Pl.XV). Elsewhere the red is very frank. By the action of the fire are explained these variations of color. As the color in the furnace was attacked by the fire more or less strong, it has changed from black to red. The burning of such enormous masses could not be everywhere uniform, in spite of the skill of the workmen. Some parts were calcined. On the ground tone, the painter placed with discretion some touches of violet red; he did this for the shoes of the horses, the arms of the warriors and some other accessories. As for the white, he used it for his grounds and for touches with the brush, that rendered the service required of lines engraved with the point on vases with black figures.

A theme that constantly reappears on those coffins is one of those that Greek art took from oriental art, and that it has most faithfully transcribed, the group formed by two lions facing or back to back, or by two of these animals occupied in menacing or devouring a beast, stag, goat or bull (Fig. 122).

Mural painting must have frequently employed this motive, that can be extended or compressed at pleasureto fill the secondary panels of the walls, spaces remaining free between those filled By scenes with numerous persons. Of this theme, the so-called sarcophagus of Camiros offers two of the most common variants. At the bottom are two lions back to back according to the formula preferred in Egyptian art, and above between two lions f facing each other after the Assyrian custom is a bull, that lowers his head and is going to strike with his horn. In the last group, the drawing of the lions is very conventional, while that of the bull is accurate and free. The painter repressed from nature that one of these animals which he had under his eyes in daily life; as for the outline of the passing lion, he borrowed it from the fabrics of Chaldean rugs. As examples of the feeling for life possessed by the artist may also be cited the wild boar and sow that root up the earth with their snouts on another sarcophagus (Fig. 122). It is the same for the wild boar with lowered head that faces the lion.(Pl. XV). Besides actual animals, one finds also on the borders of coffers all those composite beings, to which the fancy of the Egyptians and Chaldeans gave birth, the sphynx, griffin, siren, harpy, Pegasus, and the satyr with a horse's tail. On a sarcophagus of the British Museum, the two panels between which is divided the ornamentation of the lid are separated by a band of small width, filled by a long series of factitious animals, represented as marching, others in repose, crouching or standing.[1]

Note 1.p.267. Murray. Terra Cotta Sarcophagi, etc. Pl. I.

To the same lategory belonged winged personages, that often appeared in this decoration in which they played various parts. On the head of a sarcophagus in Berlin, the centre of the band is occupied by a female genius that archaeologists call the P Persian Artemis; in each hand the goddess holds the tail of a lion, that seems to make an effort to escape from that group. (Fig. 122). Elsewhere, above chariots racing fly with spread wings, winged personages of indeterminate sex in which it has been desired to see either Nikes or personifications of Agon, of contest for the prize (Fig. 124). A curious image and unique of its kind is that of a monster, that at first vew is taken for a satyr; but as soon as the elements entering into its composition are analyzed, it ceases to appear to have a right

rrent to that title. It has the face of a man with a small [illegible]
of strong projection, a beard, arms and hands; from the [illegible]
[illegible]
its shoulders, the rounded rump to which is attached the tail,
the thin legs and the shoes terminating them. In truth, it is
a centaur, but the two natures combined in this type are mix[illegible]
in different proportions and according to a different principl[illegible]
than in the classical centaur. The ceramic painters of Clazo[illegible]
[illegible]
[illegible]
life of action, in the variety of attitudes imposed on it b[illegible]
gymnastic exercises and the accidents of battles. On the [illegible]
of the sarcophagus in London are two great compositions, each
comprising a score of actors without including the horses. At
the top is a chariot race (Fig. 123). Perhaps the artist h[illegible]
[illegible]
elsewhere in other panels of the decoration of this coffer,
and also on other sarcophaguses. On the one hand, to the spe[illegible]
[illegible]
of the epic period, is recalled an episode of the Iliad, the
games that Achilles celebrated at the funeral of Patroclus.
What seems to indicate here a memorial of the poem is, that i[illegible]
the middle of the scene itself is believed to be recognized t[illegible]
[illegible]
work as a spy in the camp of the Greeks, and who wish to p[illegible]
him to death. On another part and with those ancient families
of Codrides and Nelides, that claimed to carry their origin
[illegible]
the Ionian cities, the rite of princely obsequies perhaps still
comprised in the 6th century games of this kind in memory of
the past. Below the field on which they are represented is a
[illegible]
[illegible]
vements are more violent. This is a battle, or rather a [illegible]
charge (Fig. 125). The riders are covered, not by helmets [illegible]
by tall caps that may have been made of the skin of a beas[illegible]
instead of felt; a very large quiver or perhaps a great c[illegible]
is fastened to the side of the horse. Mounted in a full [illegible]
gallop, some of these riders brandish spears and the others
[illegible]

right to that title. It has the face of a man with a great nose of strong projection, a beard, arms and hands; from the horse is derived the long mane that surmounts its head and floats on its shoulders, the rounded rump to which is attached the tail, the thin legs and the shoes terminating them. In truth, it is a centaur, but the two natures combined in this type are mixed in different proportions and according to a different principle, than in the classical centaur. The ceramic painters of Clazomenes have not always kept to those merely decorative images; t they have endeavored to represent the human figure in all the fire of action, in the variety nf attitudes imposed on it by gymnastic exercises and the encidents of battles. On the cover of the sarcophagus in London are two great compositions, each comprising a score of actors without including the horses. At the top is a chariot race (Fig. 123). Perhaps the artist had a twofold reason to select this theme, which we see reappear elsewhere in other panels of the decoration of this coffer, and also on other sarcophaguses. On the one hand, to the Greeks of Ionia, who were familiarized from infancy with the scenes of the epic period, it recalled an episode of the Iliad, the games that Alhilles celebrated at the funeral of Patroclus; what seems to indicate here a memorial of the poem is, that in the middle of the scene itself is believed to be recognized t the adventure of Dolon, seized by Ulysses and Diomed after his work as a spy in the camp of the Greeks, and who wish to put him to death. On another part and with those ancient families of Codrides and Neleides, that claimed to carry their origin to the heros of Homer, that who had long furnished chiefs to the Ionian cities, the rite of princely obsequies perhaps still comprised in the 6th century games of this kind in memory if the past. Below the field on which they are represented is a file of lions and of imaginary monsters. Then comes a second scene, where the personages are even more numerous and the movements are more violent. This is a battle, or rather a cavalry charge (Fig. 123). The riders are covered, not by helmets but by tall caps that may have been made of the skin of a beast i instead of felt; a very large quiver or perhaps a great case is fastened to the side of the horse. Hastening in a furious gallop, some of these riders brandish spears and the others long swords with which they attack infantry covered by helmets

and the heavy armor characterizing the Greek hoplite at about that time. Attacked by this formidable arm, Several hoplites were wounded and have fallen to the earth. Their comrades form around them. They protect them with their large shields to prevent the horses from crushing them under foot and the enemy f from finishing them.(Fig. 123). We can reproduce here only a fragment of this very vivid scene; there are further many gaps at the right of the field. Although at a very small scale, the added sketch will give an idea of the entire decoration of the lid, the only one that has come to us entire.[1]

Note 1.p.269. Two similar compositions ornament the opposite face of the lid; but these are more effaced and have not been reproduced.

What foes this painting represent? This is not one of those combats celebrated in Homer, which sculptors and painters have pleased themselves by figuring on the pediments of temples and on the sides of vases. Here among the riders are several traits that announce barbarians;[2] the enormous quiver carried in the hand, the cap that covers them and the arms that they use, very different from the short Greek sword. There is reason to seek here a memorial of those invasions of Cimmerian hordes, that desolated Asia Minor about the middle of the 7 th century. The impetuous spirit of this charge corresponds well to the expression "ravaged by incussions," that Herodotus employs to define the character of the raids that Scythian invaders then made t through the rich countries of Ionia and of Lydia.[3] In the valleys of the Hermos and meander, men must have long continued to speak of the murderous invasians of those savage bands, relating to children the terrors that their fathers felt and the disasters that they experienced. The episodes of those bloody combats would become a commonplace of Ionian painting, as later after the Median wars, Grecian artists at Athens and elsewhere loved to show fighting in their reliefs, frescos and the decoration of their vases, the Persian cavaliers and the Greek hoplites.

Note 2.p.269. Murray gave to Monuments Piot (1897. p.27-52, Pls.IV-VII) the first news of the beautiful sarcophagus just acquired by the British Museum, and first stated this conjecture, which has been generally accepted. He reproduced it in Terra Cotta Sarcophagi.

Note 3.p.2.9. Herodotus. I, 6.

There are noted dogs running beneath the bellies of the horses, as if they accompanied them to throw themselves on the enemy charged by the cavaliers; but this role could not be attributed to them, seeing in them auxiliaries whose intervention characterized the tactics of a tribe of barbarians. The same dogs are found with the same behavior in the chariot race (Fig. 124). From various texts cited in reference to this, it results that the use of fighting dogs at that epoch was very general in Asia Minor, as well as among the Greeks of the coast and t the peoples inhabiting the interior of the peninsula, Cappadocians and Lydians.[1] The artists saw there in the rapid motion of the foolish circuits of the dogs thus lanuched in the midst of scenes of war and of gymnastic games, a picturesque motive that they took into possession to fill their paintings.

Note 1.p.270. All these texts are approved by Murray (Monuments Piot. Vol. IV. p. 29-30.

Besides this great battle scene, on this sarcophagus and on several others are the representations of numerous combats between Greek warriors, infantry fighting in pairs or sustaining the attack of persons mounted on chariots or horsemen, who have alighted to come into closer fights. As in the conflicts of the Iliad, sometimes spears and swords are crossed over the body of a wounded soldier or a corpse by adversaries facing each o other.(Fig. 125). At the two ends of the field are chariots in which stand the drivers, they await the heros who will mount them after the quarrel is once decided. It is difficult not to see there a memory of the Homeric battles, as in that episode of the Dolonic repeated on many of those sarcophaguses.

In several of these images the armor of the hoplite comprises one piece not usually indicated on the vases, on which are represented scenes of the same kind. This is a sort of apron fastened on the orb of the shield, falls before the legs of t the soldier to his ankles; it must be made of leather to protect efficiently the thighs and knees against stones thrown and against downward thrusts of the spear.(Fig. 126). The hoplites have the cuirass over the short tunic; their calves are enclosed in greaves that rise to the knee. The helmet is that termed the Corinthian helmet with cheek and nose pieces and a high c crest, a long plume floating behind and below the shoulders.

frequently this helmet has at right and left two horns rising

[illegible]

the Iliad; it has for ornaments two whole tusks of a wild boar

Note 1.p.271. Iliad. X. 262-265.

Chariot races countless caused the role that they played in the funeral games, and are one of the themes that recur [illegible] they appear only on the lid, on the wide band forming the the corner of the coffer, and there are then two chariots separated by a single personage, sometimes Artemis contempla- [illegible] 125). There is an arrangement of the same sufficing to recall [illegible] more complicated, this same scene is figured on the lid, on the long borders of the coffer and on its internal surfaces, [illegible] ally required to place a central motive at the middle of his composition, at the two sides of which the chariots follow e- [illegible] symmetry of the whole. Thus it often has no connection with the subject on which it is inserted. So on the lid of the sarcophagus in London, the murder of Dolon by Ulysses and Diome- [illegible] ing to do here. We cannot admit that it belongs in this painting of the games celebrated in honor of Patroclus, games nowhere in question in the epic period nor in the cyclic poems.[1] Elsewhere the central motive is attached better to the painting than it does in two. On this same sarcophagus it is not alone the coffer itself and its face that the painter has represented;[2] in the interior of the coffer are represented the preparations. The chariots are there all ready to start. [illegible] foot on the ground. Before each team is a hoplite that h[illegible] ages a wolf and seems to hand it to the driver; between the two chariots is a servant who leaps while playing the cast[illegible] to excite the horses (Fig. 126). Then in this painting as central motive are 4 hoplites that appear to execute a warli[illegible] [illegible] two nearest it face each other and hold between them a [illegible]

Frequently this helmet has at right and left two horns rising to the height of the crest. Such is the helmet of Ulysses in the Iliad; it has for ornaments two white tusks of a wild boar.[1]

Note 1.p.271. Iliad. X. 263-265.

Chariot races doubtless caused the role that they played in the funeral games, and are one of the themes that recur here most frequently. On sarcophaguses whose decoration is simplest, they appear only on the lid, on the wide band forming there t the border of the coffer, and there are then byt two chariots separated by a single personage, sometimes Artemis conquering monsters (Fig. 123), sometimes a winged goddess, the Nike (Fig. 125). There is an abridgement of the same sufficiing to recall the image; but on other sarcophaguses where the decoration is more complicated, this same scene is figured on the lid, on t the long borders of the coffer and on its internal surfaces, and develops there in a series of chariots. The painter is usually required to place a central motive at the middle of his composition, at the two sides of which the chariors follow each other in opposed directions; but this motive has there a purely decorative value. It intervenes only to regulate the s symmetry of the whole. Thus it often has no connection with t the subject on which in is inserted. So on the lid of the sarcophagus in London, the murder of Dolon by Ulysses and Diomedes occupies this place. Now that episode of the Iliad has nothing to do here. We cannot admit that it belongs in this painting of the games celebrated in honor of Dolon, games nowhere in question in the epic period nor in the cyclic poems.[1] Elsewhere the central motive is attached better to the painting that it cuts in two. On this same sarcophagus it is not alone the course itsel and its fine dash that the painter has represented;[2] In the interior of the coffer has he represented the preparations. The chariots are there all ready to start. Some drivers already stand on the chariot and others yet have one foot on the ground. Before each team is a hoplite that brandishes a whip and seems to hand it to the driver; between each two chariots is a servant who leaps while playing the castanets to excite the horses (Fig. 126). Then in this painting as the central motive are 4 hoplites that appear to execute a warlike dance. The two farthest from the centre turn their backs; the two nearest it face each other and hold between them a nude

young man who plays the flute to regulate their movements (Fig. 126, lower part). This sort of Pyrrhic dance must have its definite place in the funerary festival.

Note 1.p.272. The conjecture is that of Murray.

Note 2.p.272. Murray. Terra Cotta Sarcophagi. Pls.I, VI.

The painting of the flat border at first sight seems to be a simple repetition of that of the lid; yet there are sensible differences.[3] There at the centre is no motive other than a p person standing, which forms the separation between the two opposed lines of chariots in the race. Those leave the angles as if to meet at the middle part of the band. Perhaps the person thus placed as a scout personifies the aim to which all t those teams tend. Another curious peculiarity; at both ends of the band is a column placed on a stepped base (Fig. 124). In the object on its top is believed to be recognized one of those great bronze vases, that in the story of the games given in memory of Patroclus are mentioned among the prizes intended f for the winners. A shield is placed against the column, and on the other side of this support in a constrained attitude, as if tied to the shaft, is a person leaning on a staff (Fig. 124). This would be the prizes of the race, a kettle, a shield and a slave.[1] We finally call attention to the caps of the drivers of the chariots (Figs. 124, 126). These have a sort of cap on the head close to the skull like the Turkish fez, behind it b being a tuft of several plumes floating in the wind. The cap had an aigrette like that now ornamenting the fez, but larger and longer. Elsewhere is found no trace of this local fashion.

Note 3.p.272. Murray. Terra Cotta Sarcophagi. Pl. VI.

Note 1.p.273. The slave (a woman in the Iliad), the kettle and the shield are in the number of prizes offered by Achilles for celebrating the funeral rites of Patroclus. Canto XXIII.

If with the combats of cavaliers and footmen, real or feigned according to the manner of the game, chariot races are the favorite theme of the Clazomenian painters, there is another theme that might be expected to be found in these pages, that of the chase, a princely pleasure, that like oriental sovereigns, men of noble race must enjoy in Greek cities. In fact a single sarcophagus has preserved for us a scene of the chase; but the mastery of its treatment proves that painters were familiar w with this sort of images. Two hunters pursue the game. One is

monnted; the other stands on a chariot drawn by two horses, u under which a dog runs. Before them run spotted deer (Fig. 127).

The human figure scarcely appears except in these three series of games, combats, gymnastic games and the hunting of large game, then also in those busts sometimes enclosed by ornamental motives along the long sides of the borders (Pl. XVI).[1] But n near it in the spaces that he had to fill, the artist distributed images of demons of eastern origin and those of real or factitious animals, here passing in long files and in groups by twos or threes. All that composed an ornamentation which offers quite a different variety than that of the terra cotta friezes that come from Attic tombs. Even without causing to intervene here the diversities of genius and taste, this difference is explained. The choice of the form adopted for the sarcophagus must have been suggested to the Ionians by the sight of t the mummy cases presented to their eyes, when they traveled or trafficked in Egypt.[2] Now the interior and on the exterior of these coffers, everywhere on their sides, borders and lids, t they saw a very profuse decoration of very numerous and very different scenes. They must have sought to inspire themselves by it, if not to copy its types that were purely Egyptian, at least to give to their work something of the rich and varied appearance that it presented. For that purpose, they found abundant resources in the ornamental motives transmitted to them by Mycenaean art, and in those furnished by rugs, ivories and other objects of oriental make; they found others that gave them the means of daring more, in the paintings in which contemporaneous masters placed in view on the walls of edifices or on wooden panels, sometimes so many episodes of those epic tales, which had assumed a literary form in Asian Greece, and sometimes some of the events whose importance and singularity had most vividly struck the popular imagination.

Note 1.p.274. Entirely similar busts are found on another sarcophagus in Berlin.(Antike Denkmäler. Vol.II, Pl. 25).

Note 2.p.274. Histoire de l'Art. Vol. VIII, p.94. Böhlau. A Altionische und Italischen Necolpolen. 1898. p.14-15. Joubin. De Sarcophagis, p. 76.

It is easy to understand how the decorator used these models, foreign and national. He derived patterns from them, which then sesved him for tracing on the clay after a first and slight

burning, the sketch of the entire ornamentation. From each pattern he obtained a double image py reversing it. It it concerned one of those isolated or a group of two figures that decorate the long sides of the borders, those figures are repeated from one side to another, all alike but turned in the opposite direction (Pl. XVII). In compositions extendind the entire length of the lid or coffer was taken a similar method. The central motive is often foreign to the theme in which it is inserted. It plays there merely the part of a mark of punctuation, at right and left of which are seen repeated and turned in opposite directions the same figures, hoplites on the march, horsemen or drivers of chariots. If the surface so decorated could be folded in two like a sheet of paper, of both halves of the band, the images would correspond with sufficient accuracy to cover each other. This can be proved, notably in the represeentation of the preparations for the raec (Fig. 126). The charge of the Cimmerians is the only one of these paintings forming an exception to that rule. The horses all gallop there in the same direction from one end to the other of the band, and although a certain figure at the right seems to be merely a tracing of a figure on the left, there are sensible variations from o one part of the field to the other. The artist has desired to make of all those persons grouped in this compartment of the decoration an entirety that has its unity. One is struck by t the very peculiar character, which this painting presents and that distinguishes it from the other scenes figured on these coffers; he demands if by chance we do not have here a reduction of the famous painting of Boularlhos, and that on which was represented the encounter that Pliny sometimes calls the combat, and sometimes the disaster of the Magnetes.[1] In all t that remains of that painting, the Greek hoplites seem to have the worst, being sabred and crushed by the barbarian horsemen. It is perhaps to advance much by pronouncing the name of Boularchos in this connection; Pliny does not state that the battle represented by him was fought and lost to the Cimmerians, and other texts allude to a war that the Magnetes of the Meander sustained against the Ephesians, and where they had to suffer much.[2] It appears then wiser to renounce that part of the hypothesis; but what can be retained is, that according to all probabaility we have there a reduction in the image of this

[illegible] erected, of one of the masters of Ionian painting.

[illegible]

[illegible] sed in the *Memoir of Reinach*.

In the study that we have undertaken of the ornaments and images found on these coffers, we have been able to regard them [illegible] placed on them are extracts from the same repertory. By the distribution and the choice of the motives composing it, the style of all these ceramic painters has a singular uniformity. [illegible] in order of date." In the series thus established as seen from one monument to another, the decoration is more full, the design more flexible, the scenes become complicated and also the color, due to the resources; to give the painted parts of [illegible] a richer and gayer appearance. This fabrication certainly lasted a very long time; but it is as difficult to state when it commenced as when it ended. However it seems that to the second half of the 7th century can be attributed the vogue of these sarcophagi and to admit that the latest were not after the year 550. The campaign of Harpagus in 540 struck a blow fatal to the prosperity of Ionia. In any case, if this [illegible] could not survive the disasters that followed about the end of the 6th century the great revolt of Ionia. Clazomenae was besieged and taken by Otanes and Artaphernes;[4] this was doubtless at this time, that its inhabitants left it to settle in a neighboring island, where they felt themselves less in the necess[illegible].[5] [illegible] orders must cease, and the ceramic potters and painters were dispersed. There is not a single sarcophagus in whose decoration is manifested the style and taste of the 5th century.

[illegible]

[illegible]

violent combat, a copy more or less free of some work then celebrated, of one of the masters of Ionian painting.

Note 1.p.276. S. Reinach. Revue des etudes grecques. 1895., p. 175-179.

Note 2.p.276. Those texts will be found collected and discussed in the Memoir of Reinach.

In the study that we have undertaken of the ornaments and images found on these coffers, we have been able to regard these monuments as contemporary. What justifies this is that we have found nearly everywhere in the decoration that the brush has placed on them are extracts from the same repertory. By the distribution and the choice of the motives composing it, the style of all these ceramic painters has a singular uniformity. However striking these resemblances may be, yet one cannot deny that there are also differences; these are even sufficiently sensible that it has been proposed to arrange the sarcophaguses in order of date.[1] In the series thus established is seen from one monument to another, the decoration is more full, the design more flexible, the scenes become complicated and also the color, due to the retouches; to give the painted parts of the coffer a richer and gayer appearance. This fabrication certainly lasted a very long time; but it is as difficult to state w when it commenced as when it ended. However it seems tthat to the second half of the 7 th century can be attributed the oldest of these sarcophaguses and to admit that the latest were not after the year 550. The campaign of Harpagos in 540 struck a blow fatal to the prosperity of Ionia. In any case, if this industry resisted the first shocks of the Persian conquest, it could not survive the disasters that followed about the and of the 6 th century the great revolt of Ionia. Clazomenes was besieged and taken by Otanes and Artaphernes;[2] this was doubtless at this time, that its inhabitants left it to settle in a neighboring island, where they felt themselves less in the hands of the new masters of Asia.[3] In the anxiety of that emigration, orders must cease, and the ceramic potters and painters must disperse. There is not a single sarcophagus in whose decoration is manifested the style and taste of the 5 th century.

Note 1.p.277. Joubin. De Sarcophagis. Chap. II.

Note 2.p.277. Herodotus. V. 123.

Note 3.p.277. Pausanias. VII, 3-8; Strabo. XIV. 1-36.

The sarcophagus in London is one of the latest of those monuments and perhaps the masterpiece of this industry. Now in the reproductions of chariot races found there several times repeated is noted a convention, which can suggest a probable conjecture of the approximate date of those paintings (Figs. 125, 127). The painter desires to make it understood that each chariot was drawn by two horses; but the side view in which it was placed, the nearest horse covered and concealed his companion. To render visible the existence of the latter, the artist thought of giving the two horses two different movements. The horse entirely visible carries his head high. That one with the hidden body lowers his head. This head is profiled beside and below the head of the first horse. This naive artifice betrays the embarrassment of the painter, and at the same time proves his ingenuity. Another Ionian artist, the sculptor of the treasury of Cnidos at Delphi attacks and easily solves the same problem.[1] It appears to us that the latter must have set to w work between 520 and 510; between this sculptor and the painter that decorated the sarcophagus in question, it seems that there must be at least the interval of one generation. Thus we find ourselves led by this comparison to nearly the same result as by the statements of history; about the middle of t the 6 th century the workshops of Clazomenes produced their b best works, to close soon afterward and never reopen.

Note 1.p.278. Histoire de l'Art. Vol. VIII. Figs.163,165,167-169

5. Conclusions from the Investigation.

In the course of this examination, we believe that we have cited those of the monuments other than the painted vases, that may be required to cast some light on what was Greek painting before the Median wars. It remains to separate the data appearing to result from those researches.

A first conclusion imposed is, that the palette of the painters during the entire duration of the archaic age was very poor. On the monuments that we have surveyed, paintings on stone or marble, on clay and fixed by fire, we have found no trace of blue, nor consequently of green. The sole colors found are white, employed for grounds and for retouches inside the figures; black, that accidents in firing and weather have frequently a altered more or less; red, comprising several shades from a

brick tint to purple or even violet. Thus is confirmed the assertion of Cicero and of Pliny, that the painters from the time of Zeuxis, said to be first, until that of Apelles, assumed to be second, employed but four colors.[1] These four colors according to Pliny were white and black, red and yellow, which confirms the evidence of the monuments that we have studied. If it be true, that to execute those vast frescos which caused the adciration of all Greece, Polygnotus still used only those four fundamental tones, and for a stronger reason his predecessorss must have been satisfied with them.

Note 1.p.279. Cicero. Brutus. XVIII, 70; Pliny,H.N.,XXV,50.

Not without surprise is noted the absence of blue in all the paintings that we have surveyed, of the blue that mixed with yellow produces green. Without going back to the Mycenaean decorators, which used blue largely,[2] we know that from a very e early time in classical Greece, blue concurred with red to give edifices their polychrome ornamentation, notably on the friezes and cornices of Doric entablatures;[3] it also in the hollows of the mouldings is as well preserved as the other tones. By the polychromy of the sculptures on tufa and marble found on the Acropolis of Athens, sculptors dating from the 7 th to and 6 th centuries, it is proved that then blue also played its part in the coloring of statues, of high, middle and low reliefs.[4] If the ceramic painters did not use it, this is not because t the coloring materials producing it could not stand the test of fire. To convince one's self that they were as capable as others to incorporate themselves with the clay by the effect of the flame of the kiln, it suffices to recall the enameled figurines of Egypt, where the blues and greens have such lustre. Further, in Greece itself we find touches of green and of blue on works of the same kind, for example on the ornaments of terra cotta forming the cornice of one of the temples of Metaponte.[5]

Note 2.p.279. Histoire de l'Art. Vol. VI, Pl. XIII.

Note 3.p.279. The same. Vol. VII. Book XIII, Chap.III,sect. 15.

Note 4.p.279. The same. Vol. VIII. Pls. III, IV, V.

Note 5.p.279. The same. Vol. VII. Pl. IX.

If blue be found nowhere on steles, these tablets of sarcophaguses, this is not because the workmen with the brush did not have this color in their boxes; it is the result of method and

simplicity explained by the habits contracted from the first attempts of the growind art. When about the end of the long period after the Dorian invasion, when plastic genius had slumbered in Greece, men undertook to draw flat on a ground figures of men and animals, beginning by what Pliny terms monochromes, i.e., by iamges rising from a light ground, just as the sun f forms on a wall the cast shadow of one passing by. On the white was placed the black of smoke, powdered charcoal. When it was desired to replace black by a tone less gloomy, or to place on it some accents to indicate the modeling of the form or the ornaments of the drapery, they had the ochres, clayey earths colored by iron peroxide or sesquioxide, that were found in abundance everywhere. In the natural state or calcined, these gave at will yellows, browns and reds of various shades. If they felt the need of accenting more certain peculiarities of costume and equipment, then had purple at command, which long since in the school of the Phoenicians, men had learned to extract from the shell of the murex.

With these blacks and whites, yellows, browns and reds, the red of the ochre and that of purple, the painter composed paintings that had their harmony. This harmony was a little sombre. The whites alone, either those of the grounds or those soon e employed for the flesh of women, placed some more vivid notes there. However limited those forms of expression, the artists and their public were satisfied with them until the full 5 th century. It is not doubtful that it was so in European Greece; but in spite of the evidence of the sarcophaguses of Clazomenes, one is tempted to believe that painting in Ionia could not restrict itself always to such a poor sobriety. The Asian Greeks found themselves in a better position than the European Greeks. to gather the legacy of Myceneaa civilization.[1] They could appropriate a larger part of the processes of its industry and of its arts, motives and types created by it. Now the palette of the decorators of Mycenae and Tiryns, of Cnossus and Phaesos, were much richer than that of the artists of Corinth and of Sicyon, in whom by the siygular optacal error, the learned men of the Alexandrine age desired to see the inventors of painting. The strong tones of white and yellow, of red and blue, illumined by their gayety the frescos of the ordinary paintings of M Minos and of Agamemnon. Among other traditions of the past of

which it was the heir, Ionia must retain the taste and practice of polychrome painting. I believe with difficultw that the picture of Boularchos and that of Mandrocles were merly sad monochromes. Those scenes of battle and of military pomp, I cannot conceive without differences of contrasts and of tints, that aceented the richness of the costumes and the gleam of armor. That there may be no doubt in the mind of the spectator, of the meaning of the view reprerenting the crossing of the B Bosphorus, was it not proper for a broad blue band to represent there the blue of the sea? Ionian vases, for example those found at Rhodes, exhibit a very marked taste for lively and gay coloring.[1] On pieces that men agree were made in Etruria under the influence and in imitation of Ionian models, for example on the hydria of Polledrara, it is attributed in the decoration largely to the deep blue. The use of this tone is not doubtful, in spite of the alteration that the colors have suffered from the dampness of the cavity of the tomb.[2]

Note 1.p.280.
On the circumstances which allowed Ionian painting to follow the traditions of Mycenaean painting and to imitate polychhomy, see the observations of Hohlwerda (Jarhb.1890.p.259).

Note 1.p.281. Pottier. Catalogue. Vol. II, p. 378-380.

Note 2.p.281. C. Smith. Polledrara ware. (Jour. Hell. Studies. 1894. p.206-223. Pls. VI-VIII).

It may then be asked if the Clazomenan sarcophaguses, while being inspired by contemporary painting, really entirely represented it. Perhaps in the borrowings that it made from that painting, the master ceramist left aside certain colors found on his models, because those colors were more delicate than t the others and would have injured the success of his firing; he would have been less certain to see them come from the fire than those in current use in his workshop.

The decoration of the saccophaguses will then give only a very incomplete idea of the coloring by the Ionian masters of that time, and of the diversity of the tones that their brushes could lay on the coating or on wood, when they executed one of those historical paintings, which made a sensation in their time; but on the other hand, on what must be the composition and drawing in the works of those painters based, that find t their information worthy of confidence and full of interest.

As for the composition, we can judge of it but very imperfectly by the sarcophaguses. Those restrict the decorator by certain sacrifices, by the effect of the rigor of the forms in w which they are prisoned, and by the obligation to which they are subject to establishing an exact correspondence between t the similar parts of each band of the coffer. We have indicated the part played, where the development of a theme occupied an entire band, by a central motive, which without having a well defined relation to the theme in which it was inserted, served to determine the direction that the painter gave to the march of the figurer. This convention is explained by the requirements of symmetry; but it no less breaks the unity of the scene. One does not imagine that there could be nothing similar in the paintings of the masters. In spite of this concession to the requirements of the decoration, those representations of battles and of gymnastic games allowed to be divined how t the Ionian painter then understood the filling of the fields allotted to him, the grouping of numerous persons in a common action, varying the attitudes given to them, making their meaning seen at first sight.

What these paintings of sarcophaguses permit us best to see and divine of the merit of the models, that inspired the authors of Clazomenes, are the qualities of execution and character of the style which ornaments the lid of the carcophagus of London. In the scenes displayed in the interior and on the sides of the coffer, the movement is seixed with singular accuracy. Slender Nikes fly lightly in the space; with reins drawn, the drivers lean forward on the chariots that they hurry to t the goal. Well seated on the backs of their mounts, the riders brandish with ease the swords with which they menace the infantry, which attempt to arrest their dash. Those are firmly fixed on the ground, and have the firm bearing of the Greek hoplites, who trust in their armor and brave the leaps and attacks of t the barbarian cavalry. One of them, hit by a back stroke of t the sabre, lies on the ground beneath the shield of the comrade, that attempts to save him from a new wound. Nothing more natural than his stretched pose, leaninm on the elbow; we shall find it on the pediments of Egina. In the chariot race as in the charge of the Scythians, the horses gallop with marvellous spirit. Some have their heads lowered; others are under the

pressure of the bridle, that restrains them till the moment of the effort, raise the neck and hold their nostrils to the [illegible] One would believe that could be seen the foam flying from [illegible] [illegible] ners for the race. Its appearance is agreeably diversified [illegible] [illegible] their arms. If there be [illegible] reins in hand, that is ready to start at the first signal, the two drivers nearest the centre still have one foot on [illegible] end. The line outlining their bodies well expresses the [illegible] of the spring taken to jump at a bound into the body of the chariot.

To appreciate the style of this painting, if we have especially taken our examples from the sarcophagus of [illegible], this is because on any other one of the monuments, the spaces given to the decoration do not contain as many figures engaged in the same action; but on many other sarcophagi is found the same execution, either in images of single combats or of gymnastic games that ornament the borders of the coffers (Figs. [illegible], 126), or in those heads of men that form pendants on the faces (Pl. XV). There has been noted in what remains to us of [illegible] art, of its sculpture and painting, two different tendencies: on a certain monument is revealed a sensible predilection for vigorous and thickset forms, where the muscles are much accented; elsewhere is felt the search for an elegance that is aided to obtain by slenderness of waist and thinness [illegible] to this second school is the rendering of the human figure [illegible] [illegible], both these types suggest to the mind (Pl. XV). On the other hand, they give to the bodies of the deer fleeing before the hunter all the length and lightness desirable. (Fig [illegible]

[illegible]

[illegible]

pressure of the bridle, that retains them till the moment of the effort, raise the neck and hold their nostrils to the wind; one would believe that could be seen the foam dropping from t their lips. The same skill is in the painting of the preparations for the race. Its appearance is agreeably diversified by those castanet players placed by the painter in the intervals of the chariots, and especially by the group of warriors, which at the sound of the flute move in cadence their members and t their arms. If there be at each end of the field a driver with reins in hand, that is ready to start at the first signal, the two drivers nearest the centre still have one foot on the ground. The line outlining their bodies well expresses the force of the spring taken to jump at a bound into the body of the chariot.

To appreciate the style of this painting, if we have especially taken our examples from the sarcophagus of london, this is because on any other one of the monuments, the spaces given to the decoration do not contain as many figures engaged in t the same action; but on many other sarcophaguses is found the same execution, either in images of single combats or of gymnastic games that ornament the borders of the coffers (Figs. 124, 126), or in those heads of men that form pendants on the faces (Pl. XV). There has been noted in what remains to us of Ionian art, of its sculpture and painting, two different tendencies; on a certain monument is revealed a sensible predilection for vigorous and thickset forms, where the muscles are much accented; elsewhere is felt the search for an elegance, that is aimed to obtain by slenderness of waist and thinness of the members.[1] The painters of Clazomenes are rather attached to this second school in the rendering of the human figures; but in that of animals like the lion, wild boar and bull, they know how to express by a broad and firm outline the idea of strength, that these types suggest to the mind (Pl. XV). On the other hand, they give to the bodies of the deer fleeing b before the hunter all the length and lightness desirable. (Fig-127). They are animal painters of rare skill.

Note 1.p.283. Pottier. Catalogue. II, p. 509-510. Histoire de l'Art. Vol. VIII, p. 418.

This sense of reality is no less frankly marked by the care with which the painter, in his scenes of battles or of races,

has endeavored to render as accurately as possible even the l least details of costume and armor, this may be judged by the figure of a hoplite (Fig. 128). The artist has attached more importance to that fidelity to the copy, that nearly all persons placed in view are clothed. I see scarcely any nude figures except the castanet player and flute player of one painting of the sarcophagus of London.

Here is a last characteristic trait of this painting; in all the decoration of the coffers, where it is not a simple ornamental motive, you will not perceive one person not marching with rapid steps, that does not run or dance, who does not raise the arms in combat or increase the speed of the galloping horses. This taste for movement in what is most living and boldest, we have already noted in the little remaining to us from Ionian sculpture, in a certain relief from Miletus as in the frieze of the treasury of Cnidos.[1] The same remark has been m made concerning Ionian vases.[2] Nowhere, no more in the votive tablets of Corinth than on the metopes of Thermos, no more on the painted steles of Athens than on those plaques of terra cotta at the gates of the same city, inserted in the external walls of tombs, does one not feel in the image that sort of haste, that intense and passionate life which animates it not only in paintings such as chariot races or the charge of Scythian horsemen, but again in all groups of combatants that are seen repeated from one sarcophagus to another. From this drama of aristocratic funerals which occurred at Athens after the d decease of each chief of a noble family, the Attic painter has retained only one scene, the exhibition of the deceased that only comprises serious and meditative attitudes. Also charged with assisting to decorate the tomb and commemorate the obsequies, the Ionian artist took an entirely different method. Of all ceremonies celebrated on this occasion, the only one seeming to interest him was that of the funeral games or of horse races devouring space, oh young men making trials of strength and agility.

Note 1.p.284. Histoire de l'Art. Vol. VIII, p.415.

Note 2.p.284. Pottier. catalogue etc. II. p.510.

For Ionian painting, its ambitions, methods and the degree of mastery attained, the study of the monuments supplements in a certain measure the insufficiency of the data furnished by

[illegible]
[illegible]
the examination of the decoration of the painted vases; in
la Minor and in the adjacent islands there was not [illegible]
creators of the Mycenaean civilization and the [illegible]
[illegible]
the Peloponnesus and in Crete, the princes of that age in the
[illegible]
ved themselves of the use of no color, whose boldness did not
seem frightened by any subject, whatever moving attitudes it
comprised. Fugitives, the last survivors of the artists of My-
cenae and of Cnossos, at the time of the Dorian conquest
been able to establish themselves on the Asian coast at [illegible]
[illegible]
the sixth century, and thus left in more than one edifice speci-
ens of that impulsive and freely polychrome painting. From t
6th century, when was produced the finest of Ionian genius,
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the sense of color and the entirety of the composition. These
successions of the example caused them to gain time; they [illegible]
itiated that at first in certain secrets of the trade, most o
others less favored, discovered elsewhere only at the cost of
long experiments.
This is only a presumption; but it is fully confirmed by t
[illegible]
the ceramic artists, but who did not fail to inspire th
ves by the creations of contemporary painting in the choice
[illegible]
the ceramic painters have not employed all the colors used b
the painters of frescoes. For convenience of a manufacture th
required great rapidity in execution, they were held to a m
simple scale of tones than that of the colors of the m
more brushes passed at leisure over the plastering of the w
of the wooden panel; but if by the effect of the conditions o
their special business, they could not borrow from these pai
[illegible]
employ their repertory. From this one has already been able
form an idea by the above phrases; he can judge thus of the
[illegible] variety of the themes comprised, of the [illegible]
[illegible]

the texts. After the intaglios, the ornamented sarcophaguses authorize a primary assertion, that will justify better yet t the examination of the decoration of the painted vases; in Asia Minor and in the adjacent islands there was not between the creators of the Mycenaean civilization and the historical Greeks that break of tradition produced in European Greece. In t the Peloponessus as in Crete, the princes of that age in the decoration of their palaces had abandoned painters, that deprived themselves of the use of no color, and whose boldness did not seem frightened by any subject, whatever moving attitudes it comprised. Fugitives, the last survivors of the artists of Mycenae and of Cnossos, at the time of the Dorian conquest had been able to establish themselves on the Asian coast at Lesbos and Samos, placed themselves at the command of the chiefs of the emigration, and thus left in more than one edifice specimens of that impulsive and freely polychrome painting. From the 8 th century, when was produced the flight of Ionian genius, the painters must find their models that developed among them the sense of color and the entirety of the composition. These suggestions of the example caused them to gain time; these initiated them at first in certain secrets of the trade, that o others less favored, discovered elsewhere only at the cost of long experiments.

This is only a presumption; but it is fully lonfirmed by the monuments whose authors were art workmen rather than inventive and original artists, but who did not fail to inspire themselves by the creations of contemporary painting in the choice of their subjects and in the manner of treatinm them. Doubtless, the ceramic painters have not employed all the colors used by the painters of frescos. For convenience of a manufacture that required great rapidity in execution, they were held ao a more simple scale of tones than that at the command of the masters, whose brushes passed at leisure over the plastering of the wall or the wooden panel; but if by the effect of the conditions of their special technics, they could not borrow from those painters the richness of their palette, they had entire liberty to employ their repertory. From this one has already been able to form an idea by the sarcophaguses; he can judge thus of the complication and variety of the themes comprised, of the pleasure taken by the Ionian artists in reproducing scenes of cont-

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they had for exotism and picturesque details taken from nature.
[illegible] clearly; but we cannot take them into account before having given them a civil status that allows no doubt. In the [illegible] archaeologists now attribute an Ionian origin. We shall have la[illegible] tion by the aid of what indications, by a series of what reas- [illegible] cream of concessions; not until the time when we have [illegible] have been produced at Samos or Miletus. It is entirely other- wise with those terra cotta sarcophaguses from which with full assurance we have demanded information. They have all been tak- en from the soil of Ionia, and they have been in too great num- ber for it to be possible to see in them other than the products of a local industry.

Then it seems to us what may be deduced from the observations suggested to us by the sarcophaguses of Clazomenae. About the [illegible] suffered a first attack by the Persian conquest, Ionian paint- ing was in advance of painting in Peloponnesus. If in Pliny's historical survey the latter figures in the first rank as the forerunner of the Greek painting of the 5 th century, it is [illegible] place of honor. The guide which Pliny followed in the first chapters of Book XXXV seems to have been Xenocrates of Sicyon, [illegible] to exaggerate the claims of the artists of his native city.[1]

[illegible]

The archaic art of Ionia has not had, like that of Pelopon- nesus, its historians, whose statements might have passed from those compilations of the Alexandrine and Roman ages, that are in many matters the sole sources to which we now have recourse for the study of antiquity. It appears to us no less certain that about the time after many hesitations, when Greek art defi- [illegible]

contemporary life, that had chanced to strike the imagination of the spectator; he aas understood what a very marked taste they had for exotism and picturesque details taken from nature.

The painted vase will give the same impression, perhaps more clearly; but we cannot take them into account before having g given them a civil status that allows no doubt. In the cemeteries of Etruria were collected nearly all the vases to which archaeolgists now attribute an Ionian origin. We shall have to show by the aid nf what indications, by a series of what reasonings they arrived at conclusions, which one can no longer d dream of contesting; but until the time when we have proved that their assertions merit entire confidence, we shall not feel it right to invoke here the evidence of vases believed to have been produced at Samos or Miletus. It is entirely otherwise with those terra cotta sarcophaguses from which with full assurance we have demanded information. They have all been taken from the soil of Ionia, and they have been in too great number for it to be possible to see in them other than the product of a local industry.

Then it seems to us what may be deduced from the observations suggested to us by the sarcophaguses of Clazomenes. About the middle of the 6 th century, before the prosperity of Ionia had suffered a first attack by the Persian conquest, Ionian painting was in advance of painting in Peloponessus. If in Pliny's historical survey the latter figures in the first rank as the forerunner of the Greek painting of the 5 th century, it is due to the chance of loose readings of Pliny that it owes that place of honor. The guide which Pliny followed in the first c Chapters of Book XXXV seems to have been Xenocrates of Sicyon, in whom was visible the entent to enhance the value and even to exaggerate the claims of the artists of his native city.[1]

Note 1.p.286. J. Blake and E. Sellers. The elder Pliny's Chapters on the History of Art. Intriduction, p.16-26.

The archaic art of Ionia has not had, like that of Peloponessus, its historian, whose statements might have passed into those compilations of the Alexandrine and Roman ages, that are in many matters the sole sources to which we now have recourse for the study of antiquity. It appears to us no less certain, that about the time after many imitations, when Greek art brilliantly preludes those masterpieces, that the succeeding century

[illegible]

[illegible] of its brush, we have only been able to express a con-
jecture, that presents a high degree of probability; but for a
the variety of the themes attempted and the spirit carried in-
to the execution of its works, we are better informed, thanks
to some rare evidence of the ancient authors, and especially
to the [illegible]. The [illegible] of these
monuments show us an art interested in all the manifestations
of life, which to represent them by lines and colors, observ-
es before with a curious eye, and with an intelligent el-
by endeavors to seize the traits that can best characterize
a site, a species or an individual.

If there be no illusion in the idea that we have thus form-
ed of Ionian painting, of its style and its merits, we have [illegible]
to believe that its examples could be for something and [illegible]
for much in this progress of Attic painting, which are connect-
ed by Cimon with the name [illegible]. [illegible]
even pass with him as an innovator, we can perhaps conjecture
from what we know of the history of the other art of statuary.
Attic sculpture was long delayed in cutting with a bold [illegible]-
ess the coarse tufa of the hills of the plain; it only began
to make its style more flexible under Pisistratus, when the
island sculptors had brought it the marble of their Cyclades,
and had taught it to chisel that. Must not an analogous pheno-
enon have resulted for painting? Connected as it was with Pol-
ycrates of Samos and Lygdamis of Naxos, when Pisistratus desi-
to transform and beautify Athens, must he not have appealed to
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we have found on the Acropolis statues, whose Samian origin is
[illegible]
of its painters, pupils or rivals of Saurias?

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sis; but if one admits that clear indications authorize
conjecture, the part played by Eumares, will seem even more
[illegible].
whose procedures and taste it would appropriate in a certain
measure, would have made its influence felt even in Polygno-
tus, even in the workshops where were preserved the [illegible]

must see blossom in the multitude, Ionian painting was superior to that which flourished in the workshops of Corinth and of S Sicyon. On the subject of the resources of its palette and the habits of its brush, we have only been able to express a conjecture, that presents a high degree of probability; but for t the variety of the themes attempted and the spirit carried into the execution of its works, we are better informed, thanks to some rare evidence of the ancient authors, and especially to the sarcaphaguses of Clazomenes. The decoration of these monuments show us an art interested in all the manifestations of life, which to represent them by lines and colors, observes nature with a curious eye, and with an intelligent sincerity endeavors to seize the traits that can best characterize a site, a species or an individual.

If there be no illusion in the idea that we have thus formed of Ionian painting, of its style and its merits, we have reason to believe that its examples could be for something and perhaps for much in this progress of Attic painting, which are connected by Pliny with the name and initiative of Eumares. What might even pass with him ar an innovator, we can perhaps conjecture from what we know of the history of the other art of statuary. Attic sculpture was long delayed in cutting with a bold rudeness the coarse tufa of the hills of the plain; it only began to make its style more flexible under Pisistratus, when the island sculptors had brought it the marble of their Cyclades, and had taught it to chisel that. Must not an analogous phenomenon have resulted for painting? Connected as it was with Polycrates of Samos and Lygdamis of Naxos, when Pisistratus desired to transform and beautify Athens, must he not have appealed to the Ionian painters, for the same reason as to the sculptors? we have found on the Acropolis statues, whose Samian origin is not contested. Why did not Samos also send to Athens some one of its painters, pupils or rivals of Saurias?

The coming of Ionian painters into Attica remains a hypothesis; but if one admits that clear indications authorize this conjecture, the part played by Eumares will seem even more important. By the intermediary of Eumares, Ionian painting, w whose procedures and taste it would appropriate in a certain measure, would have made its influence felt even in Peloponessus, even in the workshops where were preserved the practice

of an art, which was till then but slowly developed, [illegible]
art from which came the votive plaques and painted vases of Corinth as well as the metopes of Thermos. Pliny [illegible] [illegible] alone we know, but nothing of his works. He presents Cimon as [illegible]

This action of Ionian art after brief delay must act on the art of European Greece in another way in the domain of painting [illegible] [illegible] ting at the beginning of the 5th century B.C. must the work of Giotto will be for Italian painting at the commencement of the Renaissance, a revelation of an entire world of ideas [illegible] wards, the starting point of all future progress. Thasos had been peopled by the Parians and not alone this historical fact, but also analogies of style had led us to place to the account [illegible] that island. A painter himself, Aglaophon, father and master of Polygnotus, could be only a pupil of the painters of Miletus and of Samos. Then from them Polygnotus proceeds by the first [illegible] use that he made of it, is not there disclosed the very [illegible] of the style, that tradition had transmitted to it by Aristocles? Did not the examples by which it profited concur in giving it this expressive realism and this entirety of great compositions, which quite at first gave to its works a success without precedent? did it not there acquire this taste for picturesque effect divided in certain arrangements indicated by Pausanias, in the course of the long description that he has left us of the frescoes of the Treasury of the Cnidians at Delphi?

At the close of this study, where with a diligence [illegible] [illegible] and attention, we have endeavored to collect and combine all the indications that could throw light on these obscure origins, here is the conclusion to which our research leads; during this 6th century in which is prepared and [illegible] the splendid flowering of Grecian painters, that must [illegible] illustrious the so-called age of Pericles, painting a[illegible]

of an art, which was till then but slowly developed, of the a art from which came the votive plaques and painted vases of Corinth as well as the metopes of Thermos. Pliny indeed established a connection between Eumares and Cimon of Cleones, the last of those painters preceding the Median wars, whose name alone we know, but nothing of his works. He presents Cimon as the continuer of Eumares, whose methods he resumed and perfected.

This action of Ionian art after brief delay must act on the art of European Greece in another way in the domain of painting, but with even more force and more marked ascendancy. This Polygnotus of Thasos was an Ionian, whose work was for Greek painting at the beginning of the 5 th century B.C. what the work of Giotto will be for Italian painting at the commencement of the Renaissance, a revelation of an entire world of ideas and of forms suited to express them, the signal for the march forward, the starting point of all future progress. Thasos had been peopled by the Parians and not alone this historical fact, but also analogies of style had led us to place to the account of the insular school the reliefs, that have been collected in that island. A painter himself, Agaophon, father and master of Polygnotus, could be only a pupil of the painters of Miletus and of Samos. Then from them Polygnotus proceeds by the first that he received. His genius is doubtless his own; but in the use that he made of it, is not there distinguished the very a apparent imprint of the style, that tradition had transmitted to it by Aglaophon? Did not the examples by which it profited concur in giving it this expressive realism and this entirety of great compositions, which quite at first gave to its works a success without precedent? Did it not there acquire this taste for picturesque effect divined in certain arrangements indicated by Pausanias, in the course of the long description that he has left us of the frescos of the treasury of the Cnidians at Delphi?

At the close of this study, where with a diligence that risked wearying the attention, we have endeavored to collect and combine all the indications that could throw light on these obscure origins, here is the conclusion to which our researches lead; during this 6 th century in which is prepared and sketched that splendid flowering of Grecian painters, that must make illustrious the so-called age of Pericles, painting appears to

have been behind architecture and sculpture. So far as one can judge of an art, whose chief monuments have been lost, it had not then produced works announcing the approach and dawn of o increasing perfection, as frankly as in certain statues of the Acropolis and in certain Attic and Ionian reliefs. Already the technics of the roughing tool and the chisel had acquired an abundance of resources, due to the compLaisant docility of the clay and the virtues of the marble, a flexibility and certainty that the brush was far from having attempted. It is that in spite of appearances, this is more complicated and compels a greater effort than the technics of sculpture. To render the modeling of the living form by by means of lines and colors applied on a plane surface is more difficult than to reproduce what is seen and touched, as in statuary in the round, or even than to transcribe it as done in relief by reducing it to a s superposition of planes. The painter scarcely knew how to juxtapose in his pictures figures almost always seen in profile, a mode of presentation, that could not fail to give the appearance of the image a certain uniformity, that did not relieve and diversify warm and varied colors.[1]

Note 1.p.289. Histoire de l'Art. Vol. VIII. p.348-353; Figs. 153-156.

Yet the architect and painter had used color with much decision, the first for decorating the entablatures of his edifices and to distinguish the different tones by the difference of t tones, the second to illuminate his statues and reliefs. For this purpose, both had recourse to very frank and sometimes a almost violent tones. In those conditions, it appeared strange that the painter should be condemned to ignore certain colors, that others employed in his vicinity and under his eyes. We have believed it possible to admit, that he was a little less timid and exclusive in Ionia than in Peloponessus; but in Ionia itself, what dominated in the most careful works of historical and mythological painting, as we have been warned by the sacrifices od Clazomene, there were also the four fundamental colors enumerated by Pliny aud to which Cicero alludes. This system does not pergit surprise; but this may perhaps explain it. When Greek geniuses undertook to suggest by various means of expression at the disposal of plastics, as it had previously done by poetry, the impressions that it received from the sight of the

external world, what it at first attempted was to seize and e render the beauty of the living form on repose and in movement. To succeed in this, it applied itself with ever increasing patience and passion to measure the dimensions of bodies and determine their proportions, to define the relations that must occur between the different parts of the entirety, to follow and transcribe in its soft or firm inflexions the outline limiting the body, to note and reproduce the reliefs of the muscular masses, the projections or depressions of the flesh, that inside of this contour indicate the separation of the organs, the attachment of the members and the mechanism of their articulations.

Being entirely in that effort, Greek artists devoted less a attention that those of many other peoples, and particularly than our modern artists, to the play of color and to its tones, to the magic of the hues that it scattered over forms, to the diversity of the values given to it by the light, as it is less free and more or less mixed with shadow. In Greece, even when the brush had there acquired its full mastery, the composition of the painter appears to have always been affected up to a c certain point by this abstract conception of form, that had b been that of the first creators of this art. Nothing authorizes us to believe that anyone of the celebrated painters in Greece was a colorist in the sense in which we understand the word. Greece seems to have had more than one Raphael; it had neither a Titian, Veronese, Rubens nor Rembrandt. Perhaps if we had under our eyes all the monuments of Greek painting, we should not hesitate to apply even to the wisest and freest works of this art the judgment that Denys of Halicarnassus gave to the archaic frescos, whose style he compares to that of Lysias (Sur Isee, p. 591):- He says;"There are certain ancient paintings executed with very simple colors, where there is found no diversity of tones, but in which the drawing owes much charm to its perfect accuracy."

Chapter XIX. Ceramics.

Forms of Painte Vases and the Technics of painting on Clay.

1. Method to be pursued in the study of painted vases and the grand divisions of that study.

The industry of the painted vase had a singular activity in Greece, and a prodigious fertility. By thousands are counted those of its products, which in spite of their native fragility have escaped all chances of destruction to which they appeared to be exposed.[1] When attention was fixed on them about t the end of the 18 th century, the products of this industry aroused in archaelogists a strong movement of curiosity, which became more and more intense as more numerous vases left the earth, when it was better understood under what very different aspects those monuments could be considered. The learned men who labored in classifying and describing them did not have in these researches the same preoccupations. Some were particularly interested in the themes of the paintings that decorated t the clay, and applied themselves to discover their meaning. T They discovered there either myths of which no remembrance has been preserved by the literature, or variants of well known myths never before suspected. Sometimes they sought information concerning the games and dances of their gymnastic exercises, on the arrangement of their festivals and the customs of the gyneceum, on the entire course of the public and private life of the ancients. Others placed themselves at a very different point of view. What they studied in the paintings was t the drawing of the image; the interpretation of the living form given there by the brush of the ceramic painter, an interpretation which they could take pleasure in seeing become more sincere and more free from age to age and school to school.

Note 1.p.291. Here are some figures borrowed from M. Pottier to give an idea of the number of vases, which have found shelter in the public collections of Europe. British Museum, 5000 vases; museum of Berlin, more than 4000; museum of Munich, 1400; Museum of Vatican, 1400; museum of Naples, 4000; museum of Athens, 2500; museum of the Louvre, 6000, Industrial museum of V Vienna, 600; museum of hermitage, 2000; National Library, 2000; (Museum of Louvre, Catalogue des vases antiques de terre cuite. Vol. I, p. 11, 12). There is a total of nearly 30,000 vases t thus numbered; but since it would be proper to increase this,

if an approximation not too much over the reality were de[illegible] *There are American galleries already very rich in the produ*[illegible] *of these ceramics.* [illegible]

[illegible] *ents of this kind. There are also cabinets of private* [illegible] *and the stores of dealers in antiquities. The number of* [illegible]

[illegible]

We do not propose to call here on painted vases for evide[illegible] [illegible] ite then to aid us by casting some light on the still ob[illegible] portions of its mythology. Doubtless, when we meet with a va[illegible] painting with a subject furnished by a myth, we cannot fail t[illegible] indicate as briefly as possible the god or hero shown by the painter, and in what kind of an adventure his personages are engaged; but we shall avoid seeking the origin of the [illegible] the conception to which it corresponds. What we have undertak[illegible] [illegible] were distributed in very great number on the market of [illegible] [illegible] later in the workshops of loca[illegible] (Corinth and of Ath[illegible]), belonging to what we call industry. So far as it concerns the question of the art and that of the trade are closely [illegible]nected. Therefore before beginning the study of the ceramic[illegible] on and of the style of the figures, we must take into account the mode of fabrication.

In the commencement of this study it is proper to indicate the great divisions. As for what concerns the history of ce[illegible]ics in the preceding books, we had to begin with a brief m[illegible]ion of this primitive pottery with incised designs frequently filled by a white powder, whose most ancient types were fur[illegible]shed to us by the oldest villages of Hissarlik in the Troad. The ornamentation applied with a brush to the clay appears to us on the vases of Thera, from a very remote time, then it [illegible] developed with rare qualities of invention and richness in the so-called Cretan or Mycenaean pottery. If when we described this pottery, Crete had already rendered even more justice to the originality of the style, and proved better that it knew [illegible] [illegible] during what is called the middle ages of Greece, the [illegible]

if an approximation not too much above the reality were desired! There are American galleries already very rich in the products of Greek ceramics. In Europe itself, in France, England, Germany and Italy, many secondary museums are guite rich in monuments of this kind. There are also cabinets of private museums and the stores of dealers in antiquities. The number of antique vases preserved in public and private collections must be scarcely less that 50,000.

We do not propose to call here on painted vases for evidence on the subject of religious beliefs of Greece; we do not require them to aid us by casting some light on the still obscure portions of its mythology. Doubtless, when we meet with a vase painting with a subject furnished by a myth, we cannot fail to indicate as briefly as possible the god or hero shown by the painter, and in what kind of an adventure his personages are engaged; but we shall avoid seeking the origin of the myth and the conception to which it corresponds. What we have undertaken is to write the history of the arts of Greece. Then we shall regard vases as works of art. This also concerns works, that were distributed in very great number on the market by incessant labor in the workshops of Ionia, Corinth and of Athens, belonging to what we call industry. So far as it concerns them, the question of the art and that of the trade are closely connected. Therefore before beginning the study of the composition and of the style of the figures, we must take into account the mode of fabrication.

In the commencement of this study it is proper to indicate the great divisions. As for what concerns the history of ceramics in the preceding books, we had to begin with a brief mention of this primitive pottery with incished designs frequently filled by a white powder, whose most ancient types were furnished to us by the oldest villages of Hissarlik in the Troad. The ornamentation applied with a brush to the clay appears to us on the vases of Thera, from a very remote time, then it is developed with rare qualities of invention and richness in the so-called Egean or Mycenean pottery. If when we described that pottery, Crete had already rendered even more justice to the originality of the style, and proved better that it knew how to attain real beauty in many nf its works. We have then seen during what is called the middle ages of Greece, the art of

the ceramist entered a new path, leaving merely geometrical d decoratinn to laboriously learn again to draw from the living form of the plant, animal or man, finally attaining this on t the Attic vases of the Dipylon, but not without singular awkwardness. It remains to show how that art emancipated itself, due to the examples given to it by the major arts of painting and sculpture, how it recovered that freedom of line unknown to it since the Mycenaean age, and how at the same time it was emboldened to seek the ordinary theme of its ornamentation in the representation of the human figure. There was born, properly speaking, the industry of the painted vase, whose evolution and progress we propose to follow from the beginning of the 7 th to the middle of the 5 th centuries.

In the course of this period in the products of this industry are seen to succeed two systems of decoration, frankly opposed to each other by the principle from which they proceed. In the first, the brush draws on the light field of clay outlines detached in brown, black, dark red and violet. Since among these very dark tones, the black dominates by far, to designate these vases is employed a term, vases with black figures. The parts are reversed in the second system of decoration (Pl. XVI). The black forms the ground on which the light figures r rise. The tone is also the red that the clay takes in the fire, a color that they knew how to brighten by a light glaze. This is what is termed vases with red figures.(Pl. XVII).

We shall further have to mention some other methods taken at a certain timein certain workshops. There are vases on which the design of the whole or of only a part of the figure is only a line sketch laid on the natural tone of the clay. Other vases have received a polychrome ornamentation on a white coating, and some of these count among the most perfect works of the ceramics of Athens; but if those attempts had their hour of vogue, they never succeeded in profoundly modifying the character of Greek ceramics. The history nf this ceramics is summarized almost entirely in that of the workshops, from which came vases with black figures and vases with red figures.

2. The Shapes.

In the course of his long effort from the Mycenaean to the Hellenistic ages, the Greek has successively created many types of vases. Among the forms which he thus proposed to his pa-

[illegible]
[illegible]
the advent of the geometric style, there were seen to deve-
[illegible]
[illegible]
[illegible][1] [illegible]
neck which has been called the stirrup vase because of the cur-
ve described by its ears.[2] In his turn the potter of the Dipy-
lon liked many types that fell into disuse, when commenced the
reign of the black figure on a red ground. This is the case w
[illegible]
ground and were erected on Attic tombs. Their ovoid body is
decorated by funerary representations and is supported by a
tall and very slender foot.[3] One also seeks in vain in the la-
ter ceramics for something analogous to a wide cup with [illegible]
only [illegible][4]

[illegible]
[illegible]
[illegible]
Note 4.p.294. The same. Vol. VII, fig. 94.

[illegible]
stancy of the needs to which they corresponded, could not but
to persist. Such are the crater of medium dimensions, [illegible]
its place marked in every dining room, the amphora, whose wide-
ly opened neck allowed the pouring of waves of oil and of [illegible]
[illegible]
a young girl from her youth, finally the cup, without which [illegible]
[illegible]
vases and also some others were necessary and in daily use, [illegible]
and the potter during several centuries made them on his [illegible]
without respite; but being careful to follow the advance of
taste, he did not cease to apply himself in perfecting the [illegible]
and in rendering the appearance more agreeable to the eye and
the use more convenient. A careful revision of the curves [illegible]
[illegible]
tely correct proportion of the different parts of the [illegible]
We shall have many occasions to indicate in what fashion [illegible]
and there, the ceramist undertook the task of modifying by [illegible]
grees certain types in his repertory, now at certain [illegible]
This type received from the fingers that modeled the form [illegible]

patrons, some of them passed out of fashion for some reason, after a certain time, the workshop ceased to make them. From the advent of the geometric style, there were seen to disappear some types that had been dear to the Mycenaean potter, such as the horn with two handles, in which has been recognized the "depas amphichypellon" of Homer,[1] and that amphora with closed neck which has been called the ttirrup vase because of the curve described by its ears.[2] In his turn the potter of the Dipylon liked many types that fell into disuse, when commenced the reign of the black figure on a red ground. This is the case w with the great crateras that were of the black figure on a red ground and were erected on Attic tombs. Their ovoid body is d decorated by funerary representations and is supported by a tall and very slender foot.[3] One also seeks in vain in the later ceramics for something analogous to a wide cup with its body resting on a great foot made of a hollow cylinder.[4]

Note 1.p.294. Histoire de l'Art. Vol.VI, p. 901, Fig. 452.

Note 2.p.294. The same. Vol. VI, p. 915, Fig. 487.

Note 3.p.294. The same. Vol. VII, Fig. 42.

Note 4.p.294. The same. Vol. VII, Fig. 94.

On the other hand, there are types, that because of the constancy of the needs to which they corresponded, could not fail to persist. Such are the crater of medium dimensions, which had its place marked in every dining room, the amphora, whose widely opened neck allowed the pouring of waves of oil and of wine, the hydria, a burden accustomed to be borne on the shoulder of a young girl from her youth, finally the cup, without which w was no repast, and the oenochoe that served to fill it. These vases and also some others were necessary and in daily use, a and the potter during several centuries made them on his wheel without respite; but being careful to follow the advance in taste, he did not cease to apply himself in perfecting the form and in rendering the appearance more agreeable to the eye and the use more convenient. A careful revision of the curves had the effect of giving the contour more elegance and an increasingly correct proportion to the different parts of the whole. We shall have many occasions to indicate in what fashion here and there, the ceramist undertook the task of modifying by degrees certain types in his repertory, how at certain times, t this type received from the fingers that modeled the forg nearest

to perfection, now then in the course of attempts made to vary it, he will change it and end by losing something of its nobility or of its grace; but before one could have reason to sketch this evolution of types, it is necessary for these types t themselves to be distinguished from each other and precisely defined. These definitions will allow us to determine once for all the signification of the terms of our nomenclature.

This nomenclature is more difficult to establish than one would be tempted to believe at first sight. There are found in the Greek authors the names of vases in most current use. Those names are found in Pollox and in other author compilers of the same sort. Finally, almost an entire book of the Banquet of the Sophists is devoted to the enumeration of the different kinds of cups;[1] but the writers know that the types mentioned are known, and give scarcely any indication of the shapes. Lexicographers almost always confine themselves to grammitical e explanations; they indicate synonums. Many of their glosses m might be represented by formulas of this sort:- "Saltcellar, a vase for containing salt. Kettle, another name for boiler." The citations multiplied by Atheneus very rarely contain some trait by which it may be possible to derive any benefit. The least figure or sketch would do our business better. many terms found in the authors never had a precise sense in the ancient language of the Greek writers, or were not employed by the poets, in which they are sought, in the special sense that they could have in the workshops. Do not we use thus the words cups, bottles, jugs and other terms of the same kind without having in view a clearly defined form when we speak them?

Note 1.p.295. Atheneus. Book XI, Sections 22-100.

Writers on ceramics have attempted to supplement this vagueness of the texts; but in haste to give a terminology to the s science that they wish to establish, they have not carried into that work a sufficiently severe criticism.[1] On indications often very slight and sometimes erroneous, they have applied to many types presented to them by the diversity of vases certain terms found in the ancient writers.[2] With these names badly justified by the hypotheses and too adventurous learned men, the editors of the catalogues of museums have mixed others, t that to save detailed descriptions, they have borrowed from t the jargon of Italian dealers in antiquities. Thus has been

[illegible]

[illegible]

On the contrary, others only rest on very contestable or [illegible] certainly false indications. Finally, some without [illegible] [illegible] variety of form of the vases described.

[illegible] Panofka, who in the first half of the 19 th century enjoyed a reputation much above his merit. (Recherches sur les véritables noms des vases grecs et sur leurs différents usages, [illegible] les auteurs et les monuments anciens. 1829.

Note 2.p.[illegible]. Letronne has decisively demonstrated this [illegible] [illegible] into vogue. (Observations philologiques et archéologiques sur [illegible] [illegible] series. vol. I, p. 334-427). In another and much shorter arti- [illegible] (Supplément aux observations sur les noms des vases grecs. [illegible] same. p.[illegible]). His conclusion is that it is "very difficult for moderns to know the true names of antique vases." There is also much to accept in a dissertation of Ussing. De nominibus [illegible]

In regard to this, we cannot here engage in minute discus- [illegible] [illegible] It will suffice us to define the types, examples of which have been most multiplied by the industry of the potters. [illegible] always, with a probability approaching certainty, apply to [illegible] [illegible] the same names destined to them by the ancients in [illegible] [illegible] has chanced to reveal it to us. If the decorator of the [illegible] Attic ceramic painter has traced the word "hydria" on the [illegible] of the great jar with three handles, that Polyxena came to [illegible] at the fountain (Fig. 150). We have there an image which [illegible] the true sense of the word hydria. It is the same for the [illegible] and the kylix. These names are found inscribed in similar conditions on vases, which by a just interpretation of the [illegible] has already seen so cases, before were found the [illegible] solved the question.[1] In nearly every case, by an [illegible]

created a wavering and confused nomenclature. Certain terms u used there correspond to all the requirements of criticism. I On the contrary, others only rest on very contestable or even certainly false indications. Finally, some without pretending to reproduce the ancient names, only aim to recall some peculiarity of form of the Vases designated.

Note 1.p.296. The first attempt was made by an archaeologist, Panofka, who in the first half of the 19 th century enjoyed t a reputation much above his merit.(Recherches sur les veritables noms des vases grecs et sur leur differents usages, d'apres les auteurs et les monuments anciens. 18.9.

Note 2.p.296. Letronne has decisively demonstrated this in discussing the nomenclature that Panofka attempted to bring i into vogue. (Observations philologique et philosophique sur l les noms des vasès grecs. In Letronne, Oeuvres choisies. 3 rd series. Vol. I, p. 334-442). In another and much shorter Article, he criticizes likewise the names proposed by Gerhard. (S (Supplement aux observations sur les noms des vases grecs. The same. p.462-466). His conclusion is that it is "very difficult for moderns to know the true names of antique vases." There is also much to accept in a dissertation of Ussing. De nominibus vasorum Graecorum disputatio. 1844.

In regard to this, we cannot here engage in minute discussions, that often lead only to the expression of a justified doubt. It will suffice us to define the types, examples of which have been most multiplied by the industry of the potters. These types present traits sufficiently marked that one can nearly always, with a probability approaching certainty, apply to them today the same names assigned to them by the ancients in the current language. It is sometimes the painted vase itself that has charged to reveal it to us. In the decoration of the great cratera now usually called the Francois vase, the brush of the Attic ceramic painter has traced the word "hydria" on the body of the great jar with three handles, that Polyxena came to fill at the fountain (Fig. 130). We have there an image which fixes the true sense of the word hydria. It is the same for the lecythe and the kylix. These names are found inscribed in similar conditions on vases, which by a just interpretation of the texts had already been so named, before were found the pieces that solved the question.[1] In nearly every case, by an indirect way

one succeeds in resolving the problem proposed in regard to e each class of vases, The solution sought is reached without t too much difficulty for the forms, that are both most common and most clearly characterized; but those forms comprise variants that vary more or less from the normal type, and that sometimes seem to serve as a transition between two neighboring types. For those forms of less frank originality, the difficulty becomes very great. Hid all these in Greece have a name specially applied to them, the name of a species in the genus? It is permissible to doubt it. Thus when we meet on our way t these secondary forms, and it becomes necessary for us to select terms to designate each of them in this study, we must frequently resign ourselves to employ names that only have a value entirely conventional.

Note 1.p.297. British Museum. A. 1054. B. 450. (Böckh. C. I. Gr. Vol. I, 545).

Principals or accessories, the types that present themselves to the consideration of the archaeologist in a rich collection of painted vases are too varied and too numerous, for one not to feel the need of putting some order in that confusion.[2] When he undertakes to enumerate and to define all those types, he feels himself led to write under the same title those connectd together by certain affinities. It has been proposed, and it is also the simplest method, to class those vases according to their purpose. Here are five groups that are so determined.[3]

Note 2.p.297. De Witte (Etudes sur les vases peints. 1865), counts a hundred different forms. Heydemann even enumerates 185 in the plates belonging to his Catalogue des vases dummusee de Naples).

Note 3.p.297. This is the classification adopted by Walters. History of ancient Pottery. Vol. I, p. 150.

1. Vases in which are preserved liquids or foods.

2. Vases in which liquids are mixed or cooled, or in which food is cooked.

3. Vases by means of which liquids are poured or foods are distributed.

4. Vases for drinking from.

5. Various vases for use of the table or of the toilette.

For each of these classes, here are the dominant forms.

So far as one ascends in the history of civilization of the

tribes settled on the coasts of the eastern basin of th[illegible]
[illegible]
great dimensions, the pithos, in which they stored in [illegible]
able quantity all sorts of liquids, water, oil and wine, a[illegible]
well as alimentary substances, such as dried fruits and [illegible]
In the domestic life of these peoples, the clay pithos [illegible]
the same part as our casks of wooden staves. They had nearl[illegible]
the same form, that of a cylinder enlarged at its middle. The
potter had learned early to erect it by bands of clay super[illegible]
sed on each other; he [illegible] it. Thus it
was given sufficient width and height for a man to enter it
and conceal himself in it, as seen in certain paintings. [illegible]
[illegible]
[illegible] by the hands. For all decoration, when it has any, it [illegible]
ceives ornaments made by hand with the point of the [illegible]
or [illegible] stamped by a roller. This is the case for those [illegible]
mous jars that are still seen arranged in a row in one [illegible]
of those palaces of Cnossos, in which were kept provision[illegible]
all kinds (Fig. 151). Exceptionally are found in our gallerie[illegible]
some [illegible] vases with the form of a pithos, but one of [illegible]
[illegible]
the dignity of a work of art, a type that belonged to the [illegible]
of ordinary pottery by the uses to which it was devoted.
[illegible][1] [illegible]
in both cases). What characterizes it are the two handles pla-
ced at the sides of the neck, attached to a body more or less
wide at top, that diminishes downward. If the services re[illegible]
from it differ little from those rendered by the pithos, it [illegible]
more susceptible than that of aiming at a certain elegance of c[illegible]
tour. The pithos has only small massive handles. In the tw[illegible]
great handles are much detached from the body of the vase, a[illegible]
with which the amphora is furnished, and in the curves that [illegible]
[illegible] handles to describe, in which the potter [illegible]
how to find an element of beauty. This is already divined in
the common amphora, of which there have been found thousand[illegible]
of examples, on the sites of ancient cities in the East [illegible]
the West. Made of red or grey clay, that has received no
neck, it terminates in its lower part in a point, which [illegible]
sunk into the sand of the cellars (Fig. 152). These same ja[illegible]
have attracted the attention of learned men by the stamps [illegible]

tribes settled on the coasts of the eastern basin of the Mediterranean, they are found in possession of a vessel of very g great dimensions, the pithos, in which they stored in considerable quantity all sorts of liquids, water, oil and wine, as w well as alimentary substances, such as dried fruits and wheat. In the domestic life of those peoples, the clay pithos played the same part as our casks of wooden staves. They had nearly the same form, that of a cylinder enlarged at its middle. The potter had learned early to erect it by bands of clay superposed on each other; he built rather than modeled it. Thus to it was given sufficient width and height for a man to enter it a and conceal himself in it, as seen in certain paintings. Made to be hidden in the cellars, the pithos is not usually ornamented by the brush. For all decoration, when it has any, it receives ornaments made by hand with the point of the compasses, or indeed stamped by a roller. This is the case for those enormous jars that are still seen arranged in a row in the cellars of those palaces of Cnossos, in which were kept provisions of all kinds (Fig. 131). Exceptionally are found in our galleries some painted vases with the form of a pithos, but one of very small size. The foreman of the workshop has thus promoted to the dignity of a work of art, a type that belonged to the class of ordinary pottery by the uses to which it was devoted.

The amphora (amphoreus or amphiphoreus,[1] is the vase carried in both hands). What characterizes it are the two handles placed at the sides of the neck, attached to a body more or less wide at top, that diminishes downward. If the services required from it differ little from those rendered by the pithos, it is mose susceptible than that of aiming to attain elegance of contour. The pithos has only small massive handles. In the two great handles are much detached from the body of the vase, and with which the amphora is furnished, and in the curves that it causes these handles to describe, in which the potter knows t how to find an element of beauty. This is already divined in the common amphora, of which there have been found thousands of examples, on the sites of ancient cities in the West as in the East. Made of red or gray clay, that hes received no ornament, it terminates in its lower part in a point, which is sunk into the sand of the cellars (Fig. 132). These same jars have attracted the attention of learned men by the stamps which

many of them bear, in which is read the name of the city from
which came the liquids contained in the vase, and also [illegible]
ly the names of the local magistrates; but the economical his-
tory of Greece are not that of its art which makes these details
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sides, it has been placed in condition to appear in the circle
[illegible], to show itself there filled with wine, that mingled with
water in the craters, will then pass into the cups of the gu-
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rical images and rich ornamental motives.

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Mycenaean ceramics did not know the amphora, at least
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the type most in favor in the workshops, particularly in those
of Attica; but it does not fall into disuse with the triumph
of the red figures; and it remains very much in vogue even in
the workshops of southern Italy, whose works represent the last
efforts of painting on clay. We cannot follow it here in all
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will suffice to indicate in what spirit the potters of the
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this form. Their starting point was the conical amphora.
had added to this at the very first a circular plate, that
ved as a base for this vessel and permitted it to be placed
flat on the ground. They enlarged the body of the vase, so
that its sides presented larger surfaces to the brush, and ga
it very short handles, placed very high and near the openin
These heavy attachments had been borrowed from commercial
phoras. The vases still retained some awkwardness (Fig. 15).

This defect did not escape the eyes of the potter. He so
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many of them bear, in which is read the name of the city from which came the liquids contained in the vase, and also frequently the names of the local magistrates; but the economical history of Greece and not that of its art which makes these data of interest. Art has nothing to see in the amphora until the time, when by the application of a colored decoarion on its sides, it has been placed in condition to appear in the dining hall, to show itself there filled with wine, that mingled with water in the cratera, will then pass into the cups of the guests. Thenceforth, this form becomes one of those which the potter retouches and improves with more persistence, while the brush of the ceramic painter is devoted to ornament it by beautiful images and rich ornamental motives.

Note 1.p.299. Atheneus. I. p.501.

Mycenaean ceramics did not know the amphora, at least as a painted vase. The amphora only commenced to play this part about the end of the period of the geometrical style. During the entire time that the reign of the black figure lasted, this is the type most in favor in the workshops, particularly in those of Attica; but it does not fall into disuse with the triumph of the red figure, and it remains very much in vogue even in the workshops of southern Italy, whose works represent the last efforts od painting on clay. We cannot follow it here in all the changes that it suffered in the course of centuries. It w will suffice to indicate in what spirit the potters of the archaic age occupied themselves without relaxation in modifying this form. Their starting point was the common amphora. They had added to this at the very first a circular plate, that served as a base for this vessel and permitted it to be placed f flat on the ground. They enlarged the body of the vase, so that its sides presented larger spaces to the brush, and gave it very short handles, placed very high and near the opening. These heavy attachments had been borrowed from commercial amphoras. The vases still retained some awkwardness (Fig. 133).

This defect did not escape the eyes of the potter. He knew how to correct it. He modeled his apphora as the sculptor modeled his statue. To each inflexion of the form, he gave its proper character, that best corresponding to the function fulfilled. So conceived and executed in that principle, the vase arouses in the mind of the observer the idea of aliving body,

our thought. having to describe, enumerate and cir...

natural divisions of the body of a man.[1] The mouth, ears,

amphora arrived at its full development, from the vertical ...

linder terminating in lips of firm design, to the ...

ve of a torso on which the handles rest as arms softly ...

ng the narrow neck that serves to support the vase. ...

ings at the beginning of the neck and around the foot, band...

the idea governs the construction of the whole, which are ...

divided into members all solitary, each of which has its ...

and its distinct effect. At the same time, the body of the ...

phora receives from the bands that shade it, a curve more ...

ly than formerly. it is reduced toward the foot, which give

it a more slender charm. Thus it takes the form in which ...

the second half of the 6 th century, it is decorated by the ...

portions leave nothing to be desired, but they did not know ...

how to adhere to them. In the 4 th century in order to give ...

more grace to the amphora, it was elongated beyond measure;

they ended by making it lean.

Note 1.p.300. On these analogies and on the terms that the ...

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between the forms imposed on living beings by nature and those ...

of man and even gave it a certain sex, according as it ...

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tions of this support. Men speak of tripods with ears ...

ctc. Morne. 857), and of eyes, i.e., of nasse-holes of ...

long Homeric epithets witness the same method. Such are ...

to man and truly to make of man "the measure of all things,

an articulated body. Comparison establishes this likewise in our thought. Having to describe , enumerate and distinguish t the different parts, as by instinct we assimilate them to the natural divisions of the body of a man.[1] The mouth, neck, shoulder, belly, foot, are the terms suggested by a glance at the amphora arrived at its full development, from the vertical cylinder terminating in lips of firm design, to the tapering curve of a torso on which the handles rest as arms softly rounded, on the narrow disk that serves to support the vase. Below those lips at the beginning of the neck and around the foot, bands of black colo accent the changes. These accents aid in seizing the idea governing the construction of the whole, which has d divided into members all solidary, each of which has its part and its distinct effect. At the same time, the body of the amphora receives from the hands that shape it, a curve more pleasing to the eye than in the past. Less swelled and less squatty than formerly, it is reduced toward the foot, which gives it a more slender charm. Thus it takes the form in which during the second half of the 6 th century, it is decorated by the p paintings of an Amasis or a Nicosthenes (Fig. 234). These proportions leave nothing to be desired, but they did not know h how to adhere to them. In the 4 th century in order to give m more grace to the amphora, it was elongated beyond measure; they ended by making it lean.

Note 1.p.300. On these analogies and on the terms that they suggest to the archaeologist, see Fröhner. Anthropologie des vases grecs. A number of phrases of the current idiom show us the Greeks as inclined to establish a constant assimilation between the forms imposed on living beings by nature and those created by human industry. It compared the column to the body of man and even gave it a certain sex, according as it belonged to a certain order.(Histoire de l"Art. Vol. VII, p.433). It b borrowed from the terms designating the different parts of that body those which it employed to distinguish the different portions of this support. Men even speak of tripods with ears (Hesiod. Works. 657), and of eyes, i.e., of hawse-holes of ships. Many Homeric epithets witness the same method. Such are the adjectives"miltoparnes and phoinkoparnes," with red cheeks, applied to ships. It seems that the Greeks desired to refer all to man and truly to make of man "the measure of all things,"

as Gorgias says.

The name of stamnos is given to a vase very near an amphora, from which it is distinguished by the breadth of the mouth, t the very small height of the neck, the smallness of the lateral handles, and the nearly spherical shape of the body (Fig. 136).[1] They term pelike a vase that varies farther still from the normal type of amphora. It recalls only by the position o the design of its two handles; but it has no neck. Near the handles it resembles the clay pots in which our cooks today make their stews (Fig. 137). As for the forms designated by the terms"bikos, orke, pekane,lekane, lagynos or lagynis," they can only be found by very hazardous conjectures in some of the vases contained in our galleries. The kados seems to h have been a sort of pail, the cadus or situla of the Romans.

Note 1.p.301. According to the texts given and discussed by Letronne, the word stamnos had no right to designate a special shape.

On the contrary, we know what was the hydria with full certainty. As even the formation of the word indicates, it was a vase intended for carrying water (hydror). Even without the l legend that we have mentioned (Fig. 130), it would have been recognized on the urns, that a number of painters have shown us as inclined to the spouts of the public fountains. The shape of the hydria nearly approaches that of the amphora. The difference is that the hydria has three handles, a large one attached to the lip and shoulder of the vase, which serves to handle it and to raise it when empty, then two mucr smaller handles fixed at the top of the body; these aid the hands to support it when full, the pase placed on the shoulder or the heads of women. (Fig. 138). The taller the hydria, the more difficult to maintain it in equilibrium. The hydria is then of less elongated form than the amphora. It has a wider body; this is the means of rendering less frequent the journeys that must be made to the fountain to supply the household. It has been agreed to call (kalpis) a variety of the hydria, that scarcely appeared till in the 5 th century. The neck is less distinctly separated from the body. The latter is more swelled. Finally, the principal handle is of less size than on the hydria of the 6 th century.(Fig. 139).

II. Krater is the generic name of the vases in which at the time of the repast is mixed water and wine. The meaning of the word is given by its etymology; krater is derived from the verb "kerannyrai," to mingle. Greek wines were too alcoholic and too luscious for it to be agreeable to dring them pure; but the s share of the two liquids in the mixture varied according to the mood of the guests. The cratera was necessarily a vase of quite large dimensions. The cupbearer prepared this beverage at one time for all that were to drink it. Frog antiquity was employed the word krater to designate the orifice or vent of a volcano and the cavity preceding that. By that only this indication, it would suffice for us to recognize the cratera in the bell-shaped vase, that we frequently see figured by the painters in pictures representing scenes of ceasts.

A vase rendered immovable by its purpose, the cratera was m much more widely opened at the top than the amphora or the hydria. It is necessary that one can conveniently dip out the liquid to pour it in the cups. In certain varieties of the type, the body was much rounded; others were less square and the arrangement gave the vase a great hollow and thus ensured it a great capacity. Two handles served to grasp and manage it, two handles by which the potter often sought to correct by the boldness of the curves and by the elegance of the attachmentr, what might be the rather heavy form itself of this very spreading vessel.

The cnatera is frequently mentioned in the Iliad and the Odyssey. But it is there a vase of metal, bronze, gold or silver. The most ancient of clay crateras known to us came from Cyprus.[1] In the first half of the 7 th century, the workshops of Corinth commenced to multiply vases of this type. It then appeared as characterized by handles of very peculiar form. From the top of the body are detached two vertical or nearly vertical stems. Each of these serves to support a rectangular plate, that projects outside the flat rim of the mouth on both sides of the vase. This brim is generally decorated by ornamental motives. The arrangement of these handles has given to this form the n name of "vaso a colonette." (Vase with column).(Fig. 140).[1] Later, among the products of the Attic workshops of the 6 th century is found another form, which has more nobility. The

handles end in an ample volute, whose terminal spiral is placed on the lip of the vas, which separates from the body a very s short column of very firm design. This is what is sometimes c called the vase a rotelle" (vase with volutes). Some of the beautiful crateras signed by the painters of the blakk and red figures present this appearance (Fig. 141). In the 5 th century, the cratera shows itself in two truly new forms, those to which are given the names of "vaso a calice" (calyx vase) and "vaso a campano" (bell vase) One of them indeed recalls the open calyx of a flower of the Campanula family (Fig. 142),and the other the profile of an inverted bell (Fig. 143). On these two varieties of the cratera, the handles lose their importance. Whether attached toward the top or bottom of the vessel, they have but a weak projection. In the paintings, the cratera is often seen placed on a fixed support, which is called hypokrateridion. It had these supports in bronze, but they were also made of clay. Several of the latter have reached us. They usually have the form of a hollow cylinder, and sometimes the brush has covered them by a rich ornamentation (Fig. 144).

Note 1.p.303. Histoire de l'Art. Vol. III, Figs. 508, 525.

Note 1.p.304. Gerhard proposed to call this form kelede. No ancient text authorizes the attribution of this precise meaning to the word kelede, which appears to have had a very vague meaning in current language.

In the decadence of the art, when Apulian potters had made crateras, the type of the cratera with volutes had their preference; but they frequently gave it dimensions previously unusual, and they complicated and overloaded the ornamentation of the vases. They preserved its movement and replaced the volute by the medallion filled by a Gorgon's head or some other mask of the same kind, modeled in relief and painted yellow and white. This is the "vaso con manicne a mascheroni" of the Italian catalogues.

A type very near that of the cratera is that of the vase without handles, rounded downward to which was applied the name of "dinos" with every appearance of reason. It could also serve for the mixing of liquids (Fig. 144); but it was impossible to use it without placing it on a support or a tripod (Fig. 145). The form of the dinos was sensibly the same as that of the "le-

[illegible]

[illegible] of clay vase, devoted to the same uses in do- mestic life. [illegible] form of the cantharus.

[illegible] psykter [illegible] as its name indicates, derived from the root that expresses cold. It served to cool the wine in hot weather by placing it in contact with a receiver in which was piled snow brought from the mountain, or was poured at the time of the repast water from some icy spring. This result was obtained in different [illegible] double wall with an inlet on the shoulder by which was intro- [illegible] liquid. Later was adopted for the same purpose another arrange- ment in which [illegible], that of a vase in form of a perfect [illegible] to float in the wine of the crater. (Fig. 140). The pei[illegible] of a cup shows us the psykter thus plunged into the ample ves- sel in which it fulfilled its purpose. (Fig. 147).

III. After the wine was collected in the pithos after leav- ing the winepress, and been transported to a distance in the [illegible], it had to be mixed with water in the cool vase of the crater. It must then be poured into the cups. Between these and the reservoir in which the mixture was made was required an intermediary. This role devolved on the kyathos.[2] This was a cup with a long handle in the form of a loop which ascended [illegible], that the hand holding it should not rise being wetted, when it dipped in the crater the liquid, the [illegible] mostly derived from the verb "[illegible]", to dip.

[illegible]

[illegible] kyathos by comparing it, after the comic poet, to the [illegible] [illegible] been between the Roman simpulum and the Greek kyathos, and replaced the simpulum at feasts in Rome, when it was the fore- [illegible]

"ledes,", the metal caldron in which the heros of Homer cause the water for the bath to be heated and the food to be cooked. The term chytra or clay vase, was devoted to the same uses in domestic life. Some vases are known to which the potter gave tha form of the chytra.

A more complicated type is that of the ,psykter", the cooler as its name indicates, derived from the root that expresses cold. It served to cool the wine in hot weather by placing it in contact with a receiver in which was piled snow brought from the mountaiu, or was poured at the time of the repast water f from some icy spring. This result was obtained in different ways. Sometimes for that purpose was employed an amphora with double wall with an inlet on the shoulder by which was introduced cold water into the space left between the two walls.[1] The wine in the inner space thus found itself surrounded by a cold liquid. Later was adopted for the same purpose another arrangement in Attic workshops, that of a vase in form of a pegtop w without handles, that was filled with cooliug liquid and allowed to float in the wine of the cratera.(Fim. 146). The painting on a cup shows us the psykter thus plunged into the ample vessel in which it fulfilled its purpose.(Fig. 147).

III. After the wine was collected in the pithos after leaving the winepress, had been transported to a distance in the amphora to then be mixed with water in the deep vase of the c cratera, it must then be poured into the cups. Between these and the reservoir in which the mixture was made was required an intermediary. This role devolved on the kyathos.[2] this was a cup with a long handle in the form of a loop which ascended sufficiently high, that the hand holding it should not risk being wetted, when it dipped in the cratera the liquid, that it was charged with distributing to the drinkers (Fig. 118). This vase comprised numerous varieties, designated by terms mostly derived from the verb "asyein", to dip.

Note 1.p.306. Saglio. Dictionnaire des antiquities. Fig.5846.

Note 2.p.306. Atheneus, (Book X, p.424) indicates well the kyathos by comparing it, after the comic poet, to the ladle of sailors. Varro (De lingua latina, IV, 26) establishes a comparison between the Roman simpulum and the Greek kyathos, which replaced the simpulum at feasts in Rome, when it was the fashion there to do everything in the Greek manner.

When the guests were numerous and drank hard, much time was lost in running from couch to couch to pour wine into the cups by the aid of the kyathos. Then it was used to fill pitchers by means of which the service was performed more rapidly. These pitchess were the oenochoe (oinichon, from oinos, wine, and cheein, to pour);[1] but the type to which was applied this generic name suffered many variations. The mouth is most frequently in the form of a trefoil with a spout opposite the handle. Usually the potter gave it a much swelled body. This is a character common to the archaic oenochoe (Fig. 149) and to that of the 5 th century (Fig. 150); but there are also very slender oenochoes with the narrow and long neck, a high and recurved handle (Fig.151). On the contrary, so to speak, on others is no longer a neck, and the body of the vessel is almost cylindrical (Fig. 150). These two last shapes are those that ceramographers have adopted the custom of calling prochos and olpe, to distinguish them from the oenochoe, properly so-called. The two terms belong to the best Greek language; but we cannot guarantee that they were particularly applied to the two varieties of the type, those designated by the nomenclature in current use.

Note 1.p.307. Oinochon.(Greek).

However temperate the Greek people has been at all times and still is, to the fashioning of the drinking vase, its potters and its painters have devoted their principal efforts; there have they made proof of most taste and ingenuity, with the work of Attic masters contempories of Pisistratus, of Cimon and Pericles. From those ceramists they had admirable works of very different types; but it is again from cups, which by the distinction of their shapes and the beauty of their paintings most charm the eyes of a delicate connoisseur.

We shall indeed avoid transcribing all the names of vases of this sort, that the diffuse erudition of Atheneus took pleasure in registering. It would be lost pains only to seek to find in the glazed cases of our galleries the pieces to which it is p proposed to apply certain of those names. What these must chiefly designate are variations of a known type, many of the varieties are due to the inventive mind of an artisan in quest of patrons, and had only an hour of vogue. What is important is to define here by examples the dominant forms. There are a

certain number, five or six at most, which the potters did not cease to reproduce during the entire time while the painted v vase was in honor. All drinking vases that we possess can be referred to one of those specific types, in spite of the singularities that characterize many of these pieces.

The simplest is that of the skyphos. This is a deep cup, that narrows downward; it has two horizontal handles attached very near the lips of the vase (Fig. 152). The cotyle had nearly t the same curvature, all the difference was that the cotyle had no handles or had but one.

The cantharus, the ancient authors tell us, was the cup from which Dionysos loved to drink.[1] It is easy to recognize it in that placed in the hands of the god in the paintings of vases. It is borne on a high and slender foot, with a bowl with sides nearly vertical. The handles start from the bottom of the cup. They are rounded and rise above the lips of the vase, where t they are joined to form a loop (Fig. 153). To this arrangement of the handles the cantharus owes its grace and originality. The term karkession appears to have designated a cup strongly resembling the cantharus, but with a recession at the middle part. The bottom is wider than the middle of the body; then the vase opens and enlarges anew as it rises toward the lips.[2] It was a very deep goblet.

Note 1.p.309. Macrobius. V. 21. Pliny. H.N.XXXIII.(Latin).

Note 2.p.309. Atheneus. XI. p.474.

The special drinking cup of luxury, the honor of rich feasts was the kylix.[3] With its bowl of small depth supported by a v very slender foot, the kylix has in general the form of our champagne glasses, but is distinguished from them by the two horizontal handles with which it is furnished. The Greek potter created this form in the time of his first attempts. He applied himself with love, from generation to generation to generation to give it purer contours and more correct proportions. In the first half of the 5 th century he attained the perfection of the type. We cannot follow the artisan in this labor of patient retouches, nor present a comparative picture of all s successive variants that arose from the effort. We must limit ourselves to showing the two extreme terms of the series. At the beginniug of the 6 th century, the kylix has quite a deep cup (Fig. 154). At the middle of the 5 th century this division

as no longer traced. The coat is more shallow and all united [illegible]

[illegible] frile of the cup seems traced with a free and bold line, that has all the appearance of a happy improvisation.

[illegible] depth.

[illegible] saucer.[1] No handle, but at the middle of the cup was a boss, [illegible] the spout of an oenochoe the milk, that is to run on the alt[illegible] [illegible] seems to have been more frequently a vase of metal than one of clay.

Note 1.p.310. Pollux. VI, 9, 5. Aristotle (Rhet. III, 4) compares the phiale to a shield.

With the red figure appears among the products of ceramics rhyton (from rein, to flow). From that time it is one of the [illegible] the potter. Two peculiarities characterize it. It has no foot. It is a derivative, an artistic arrangement of the ox horn which served savage ancestors for this purpose; like that, it could [illegible]

[illegible] lower part usually ended in a head modeled in relief, the [illegible] of a bull, ram or horse.(Fig. 158). For this head of an animal was often substituted later the head of a satyr or of a woman. [illegible] color are beautiful works of sculpture.

Note 1.p.311. On many rhytons, the lower end of the vase is not pierced by a hole. Men drink from it as from a glass or [illegible]

Vases in which foods were served do not present the same variety as drinking vases. They all come in the type of the [illegible]

as no longer traced. The bowl is more shallow and all unified with a shorter foot (Fig. 155). The potter reached this fast form of the type only after long reflection, and yet the profile of the cup seems traced with a free and bold line, that has all the appearance of a happy improvisation.

Note 3.p.309. Atheneus compares the so-called naucratites k kylixes with the phiale on account of their width and small depth.

The phiale (patera in Latin) was a shallow cup in form of a saucer.[1] No handle, but at the middle of the cup was a boss, hollow beneath, and by this hollow the hand held it by inserting the fingers (Fig. 156). The phiale served for libations. Numerous paintings represent Nike or a bacchante pouring from the spout of an oenochoe the milk, that is to run on the altar, or the wine to refresh Dionysos. According to the examples presented by these paintings, the phiale with its paneled surface seems to have been more frequently a vase of metal than one of clay.

Note 1.p.310. Pollux. VI, 9, 5. Aristotle (Rhet. III, 4) compares the phiale to a shield.

With the red figure appears among the products of ceramics rhyton (from reein, to flow). From that time it is one of the types on which is exerted a most willingly inventive mind of the potter. Two peculiarities characterize it. It has no foot. It is a derivative, an artistic arrangement of the ox horn that served savage ancestors for this purpose; like that, it could only keep its place when set on its wide mouth.

To place it on the table, it was necessary to be drained to the last drop (Fig. 157).[1] Provided with a single handle, its lower part usually ended in a head modeled in relief, the head of a bull, ram or horse.(Fig. 158). For this head of an animal was often substituted later the head of a satyr or of a woman. Some of those rhytons with the firm accents placed on them by color are beautiful works of sculpture.

Note 1.p.311. On many rhytons, the lower end of the vase is not pierced by a hole. Men drink from it as from a glass at top. Pottier. Article Rhyton in Dict. des Antiquities.

Vases in which foods were served do not present the same variety as drinking vases. They all come in the type of the pinax. We shall call them dishes or plates, according to the dimensions.

V. In all collections of Greek pottery are found vases, whose uses are divined from a peculiarity of their form. Then h have a long neck and very narrow mouth, which only allows the liquid contained in them to issue in drops. The liquids so economically utilized could only be those fragrant oils, at f first imported into Greece by Phoenicians, which the Greeks learned to make for themselves by the aid of substances brought from Syria and Egypt, as well as those which they could extract from the leaves or flowers of plants of their country. Men and women made great use of those oils with many odors, some to rub the body and hair after the sweats of the palestra, others for the very diverse cares of their toilette. Then also served for anointing the corpses of a relative or friend. The flasks containing them appear in the paintings representing funeral scenes, grouped around the bed on which reposes the dead; then they descend into the tomb with him, to protect his flesh from corruption. So there was no interment, where one does not collect some of those vases. With the frequently very high price of the essences contained thereio, it is not surprising that they were generally of very small dimensions. This smallness also rendered them easy to handle.

One cannot hesitate to recognize the lecythe (lekythos) in a vase, whose appearance recalls that of our flasks for oil.[1] It is seen to appear very early in ceramics; but it is at Athens in the course of the 5 th century, that its form is finally determined and attains the most happy proportions. With the very elongated oval of its body, its flat or even slightly concave shoulder to which is attached a light hangle, its slender neck with its mouth spreading like the calyx of the flower, t the lecythe is then one of the most elegant types that the Greek potter succeeded in creating (Fig. 159). At that epoch it sometimes attained very great height as a show piece; some lecythes are known to be more than 3.3 ft. in height.

Note 1.p.312. The word lecythes in Greek is of the femenine gender. I do not know why the custom has prevailed to precede it in France by the masculine article. After M. Pottier, whose study, Sur les lecythes blancs d'Athenes forms an authority, we believe that we should conform and not make ourselves eccentri.

This case never presents itself for the alabaster and for the aryballa, that were more particularly employed for the frequent

[illegible]

apply it and spread it over the skin.

[illegible] in classical (Greek) owes its name to the material of which were made the first vases in which the perfumes of the Orient reached the Greeks. These vases were cut in a soft alabaster that [illegible] found in Greece itself, in more than one archaic tomb. When [illegible] for the alabaster that they did not possess, they retained the [illegible] by very small ears pierced by a hole. Through these two holes was passed a cord by which the flask could be supported on the wall of a house or of the tomb. The neck is always very short. (Fig. 150).

Note 1.p.313. The Greeks explain the name of alabaster by the absence of handles; they see there a derivative of the verb labesthai, preceded by the privative a.(Etymologicum mag- [illegible] those vases, when he speaks of great pearls(H.N.IX,56).

[illegible] with top closed by a cord.[3] This has been identified in full certainty in a type characterized by its globular body, its handle and very short neck.(Fig. 151). The potters of Corinth have scattered by thousands their alabasters and aryballes over all the coasts of the Mediterranean. Closely connected with the prosperity of the industry and the commerce of the Isthmus [illegible] Attic pottery had supplanted that of Corinth in the markets of the West.

Note 2.p.313. Pollux. VII, 163; X, 63. The use of the [illegible] nes. (Greek). Kaltenis.

anointings comprised in the exercises of the gymnasium and the practices of the gynecæum. The fingers held them in place this vase easily on the different parts of the body to pour their contents there. To this use lent itself the smooth disk, at whose centre was the orifice of these two types of vases. It contained an oily material that oozed from the neck, serving to apply it and spread it over the skin.

The alabaster (alabastron or alabastos) both forms are found in classical Greek) owes its name to the material of which were made the first vases in whice the perfumes of the Orient reached the Greeks. Those vases were cut in a soft alabaster that Egypt had in rich quarries. These alabaster flasks have been found in Greece itself, in more than one archaic tomb. When the Greeks substituted plastic clay to contain their products for the alabaster that they did not possess, they retained the traditional shape for their flasks. This had an oval body, most frequently without handles.[1] Sometimes these are represented by very small ears pierced by a hole. Througr these two holes was passed a cord by which the flask could be supported on the wall of a house or of the tomb. The neck is always very short. (Fig. 160).

Note 1.p.313. The Greeks explain the name of alabaster by t this absence of handles; they see there a derivative of the v verd labesthai, preceded by the privative a.(Etymologicum magnum, p. 55, 30). Pliny indicates with precisoon the form of t those vases, when he speaks of great pearls(H.N.IX,56).

The ancients mention as devoted to some uses another type of vase, the árybaIla.[2] They tell us that it resembled a purse w with top closed by a cord.[3] This has been identified in full certainty in a type characterized by its globular body, its handle and very short neck.(Fig. 151). The potters of Corinth have scattered by thousands their alabasters and aryballas over all the coasts of the Mediterranean. Closely connected with the prosperity of the industry and the commerce of the isthmus, those forms almost fell into disuse, when after the Median wars Attic pottery had supplanted that of Corinth in the markets of the West.

Note 2.p.313. Pollux. VII, 166; X, 63. The use of the aryballa as a vase for perfumes results from this verse of Aristophanes. (Greek). Knights.

Note 2. p.213. Athenaeus. XI, 783.B. Athenaeus even states that [illegible]
word thus.

[illegible]
ten freios. Yet it suffered their influence. About the middle [illegible]
From the second it took the amplitude of its body without making it a spherical ball. This body was flattened at its bottom to fit the plane surface of the little disk, that served as a [illegible] but nothing prevents the adoption of a conventional term to designate it, such as lecythe-arybalia.

[illegible] cover, the pyxis (Fig. 163). Especially at Athens and in the [illegible] toilette found a place there.

[illegible][1] [illegible] occupied in twisting and flattening with her fingers the thread

Note 3. p.313. Atheneus. XI, 783.B. Atheneus even states that by reason of this resemblance, purses were sometimes called a aryballos. It was doubtless by a joke that was played on the word thus.

These forms were long popular, even if the manufacture of A Athens did not adopt them, aod if it preferred to them the lecythe, this was doubtless because they appeared to it as lacking grace and also offering to the brush of the decorator too limited fields. Yet it suffered their influence. About the middle of the 5 th century it placed in circulation a type tending to both the lecythe and the aryballa. From the first it borrowed its handle, the slenderness of its neck and its calyx mouth. From the second it took the amplitude of its body without making it a spherical ball. This body was flattened at its bottom to fit the plane surface of the little disk, that served as a base for the lecythe (Fig. 162). We have no reason to believe that in antiquity a special name was given to this hybrid form; but nothing prevents the adoption of a conventional term to designate it, such as lecythe-aryballa.

For running oils, then had lecythes, alabasters and aryballas, which played the part of our flasks of perfumes; they likewise had the equivalent of our pot for pomade in a round box with a cover, the pyxis (Fig. 163). Especially at Athens and in the last time of painting red figures, this is often ornamented by little pictures representing women occupied in dressing themselves, marriage scenes, sports of love. The pyxis not alone served to contain rouge and unguents. It was also a box for jewels and pins. All the accessories and instruments of the t toilette found a place there.

There only remains for mention for their oddity some rarer forms. Archaeologists long asked what could be a type, some examples of which were presented by our galleries (Fig. 164). In a half cylinder of clay, closed at one end and open at the other, it was proposed to recognize a ridge tile; but what opposed that explanation were the scenes represented on several of those objects. Thew showed the work of the wheel and of the spindle. The key of the enigma was givem by the decoration itself on one of those pieces.[1] A woman is seen seated. Her knee and thigh are placed in the hollow of the cylinder; she seems occupied in twisting and flattening with her fingers the thread,

[illegible] against the base of the cylinder (Fig. 165). [illegible] [illegible]

[illegible] the occasion for which was fur- nished to them by a vase of this sort just acquired by the mus- eum of Athens. [illegible]

Note 1.p.415. [illegible] on their tops a decoration in the form of incised scales, they gives a slightly rough surface on which the thread catches [illegible]

Note 1.p.416. [illegible] Epinetron. 1908. Lang supposes that the ones not alone served for spinners, but that it also played the part of the cushion used by our lace makers. The material could doubtless not [illegible] been fixed on the examples in terra cotta; but there would have been for embroiderers ones of soft wood. This is an ingenious [illegible] have been made with great care; but she was unable to study the numerous fragments (still unpublished) of pieces of this [illegible]

It is agreed to give the name of ascos (leather bottle) to a vase whose form recalls that of a leather bottle for wine; [illegible] to a clay vase. This type presents several varieties; here is the most ancient and most original of all (Fig. 166).

From the Latin is borrowed the word guttus to designate a vase, that from its shape must have served to pour oil into lamps (Fig. 167). This vase in black clay with ribbed sides [illegible] sometimes a medallion in relief applied on the top of the piece [illegible] ticularly in the pottery of the Hellenistic age. Painted vases [illegible] sought to retain their patrons by the skill with which then [illegible] it had to keep account of the taste for luxury, that had [illegible]

which she presses against the back of the cylinder (Fig. 165).[1] One can no longer doubt that there is the utensil which Pollux calls epinetron or onos because of the convex form of the vase.1

Note 1.p.314. To Sophoulis and to Carl Robert belongs the h honor o this small discovery, the occasion for which was furnished to them by a vase of this sort just acquired by the museum of Athens. (C.Robert. Ephemeris. 1892.p.247-255, Pl.XIII).

Note 1.p.315. Most of these onos that have been found bear on their tops a decoration in the form of incised scales, that gives a slightly rough surface on which the thread catches more easily, than if this surface had been smooth.

Note 1.p.316. Margaretta Lang. Die Bestimmung des Onos oder Epinetron. 1908. Lang supposes that the onos not alone served for spinners, but that it also played the part of the cushion used by our lace makers. The material could doubtless not have been fixed on the examples in terra cotta; but there would have been for embroiderers onos of soft wood. This is an ingenious hypothesis that it is impossible to verify. Lang surveys the examples of clay onos preserved in the museums. Her statements have been made with great care; but she was unable to study the numerous fragments (still unpublished)of pieces of this sort, taken from the excavations of the Acropolis of Athens.

It is agreed to give the name of ascos (leather bottle) to a vase whose form recalls that of a leather bottle for wine; but nothing proves that the ancients ever applied this term to a clay vase. This type presents several varieties; here is the most ancient and most original of all (Fig. 166).

From the Latin is borrowed the word guttus to designate a vase, that from its shape must have served to pour oil into lamps (Fig. 167). This vase in black clay with ribbed sides never received a decoration by the brush. Its sole ornament is sometimes a medallion in relief applied on the top of the piece. Further, this is not the place for enumerating many other forms, more or less strange, that are found in isolated examples, particularly in the potterw of the Hellenistic age. Painted vases were then scarcely made. The fashion had passed. Potters sought to retain their patrons by the skill with which then hastened to copy in clay vases created under their eyes by the industry of metal. That endeavored to renew and vary its forms; it had to keep account of the taste for luxury, that had been

aroused by the life of the court in the oriental mo[illegible] into which the empire of Alexander was divided.

[illegible] Greek potter with the freedom of his inventive imagination borrowed from the world of organic life, to combine them in [illegible] vases that he fabricated. We do not speak alone here of the little arybalies in form of a helmeted head, or of the [illegible] of hercules, that have been found as well in Sicily and Italy as [illegible] were made in a figure or of a bust of a woman, whose top [illegible] in the orifice of a vase. There are only imitations of [illegible] models. When in the entire eastern basin of the Mediterranean, the industry and commerce of the Asian Greeks undertook to [illegible] types to which were accustomed their patrons, which they desired to take from their rivals. To succeed in this, perhaps [illegible] attempted and not without success, that technics of glazed clay [illegible] mel. On those forms that he was interested in preserving, [illegible] the entire cost.[2]

Note 1,p.[illegible]. On the arybalies of Greek manufacture in glazed clay, see Heuzey. Catalogue des figures antiques de terre cuite du musee du Louvre. Vol. I, p. 214; Also Histoire de l'Art. Vol. III, p. 6.5-680., Fig 484.

Note [illegible] of these alabasters in the form of a female head, that is in [illegible] X, 4). Another of a [illegible], that was discovered in Etruria, and that belongs to the Louvre, is not in glazed clay, but of yellow clay, on which the brush has laid blacks and reds. (Heuzey, Les figurines de terre cuite du musee du Louvre, Pl. XIII, Fig. 4).

Whether the idea of these vases of a mixed character was or was not suggested to the potters of Ionia or of European Greece by the types of oriental origin, those potters early thought of taking a part in sculpture, in the composition of works [illegible]

aroused by the life of the court in the oriental monarchies i into which the empire of Alexander was divided.

To complete this study of the more common forms, it is proper to recall, were this only for the memory, those which the Greek potter with the freedom of his inventive imagination borrowed from the world of organic life, to combine them in v various ways with those which kept to the same purpose as the vases that he fabricated. We do not speak alone here of the little aryballas in form of a helmeted head, or of the head of Hercules, that have been found as well in Sicoly and Italy as in the islands and on the continent of Greecs, nor the alabasters made in a figure or of a bust of a woman, whose top ends in the orifice of a vase. There are only imitations of foreign models. When in the entire eastern basin of the Mediterranean, t the industry and commerce of the Asian Greeks undertook to compete with the Phoenicians, Ionian ceramists adopted certain t types to which were accustomed their patrons, which they desired to take from their rivals. To succeed in this, perhaps they attempted and not without success, that technics of glazed clay practised long since by the artisans of Egypt and of Phoenicia;[1] but the Greek workmen soon ceased to practice that art of enamel. On those forms that he was interested in preserving, he applied an ornamentation, where the brush of the painter bore the entire cost.[2]

Note 1.p.317. On the aryballas of Greek manufactore in glazed clay, see Heuzey. Catalogue des figures antiques de terre cuite du musee du Louvre. Vol. I, p. 214. Also Histoire de l' Art. Vol. III, p. 675-680., Fig 484.

Note 2.p.317. Coming from Cyprus, the British Museum has one of these alabasters in the form of a female head, that is in glazed clay.(Walters. History of ancient Pottery, vol. I, Pl. X, 4). Another of a Totalsemblablesimilar, that was discovered in Etruria, and that belongs to the Louvre, is not in glazed clay, but of yellow clay, on which the brush has laid blacks and reds.(Heuzey, Les figurines de terre cuite du musee du Louvre, Pl. XIII, Fig. 4).

Whetherthe idea of thesevvases of a mixed character was or was not suggested to the potters of Ionia or of European Greece by the types of oriental origin, those potters earlyythought of taking a part in sculpture, in the composition of works that

[illegible]

of an oenochoe, and four horses are placed on the cover of a [illegible]

[illegible]

and at Caere, that terminates in the neck of a bird of prey [illegible]

whose neck is formed by the head of a woman, placed between [illegible]

[illegible]

for a very curious monument belonging to the museum of the Lou-vre (Fig. 170).[1] There is seen a satyr seated against a crater with his hands holding the handles, and towards which he seems to lean as if to drink from it. At first sight, the statuette is the part of this entirely attracting most attention. Still one is convinced on examining this piece more closely, that [illegible] place in the hall of the feast, into which wine was poured mo-re than once, if not to refresh the guests, at least to awake [illegible] the body of the figurine or allowed to enter there by the vent holes, the level of the liquid was lowered or raised in the crater (Fig. 170).

Note 3.p.317. *Histoire de l'Art. Vol. VII. Figs. 44, 53.*

Note 1.p.318. E. Pottier. *Le satyre buveur, vase de surprise* [illegible] XIX, XX).

About the end of the 6 th century at Athens, the potters fa-shioned vases in the form of the head of a bearded man or Ethi-opian, and more frequently female heads, some of which were signed by Charinos, Prokles and Calliades.[2] As a type of this sort of works may be taken at the Louvre the vase, that [illegible] the Athenian.[3] Like the double Hermes in marble, it is formed by the union of two back to back and fixed together, being the head of a man and that of a woman. Above these heads at their junction rises and opens the wide neck of a vase (Fig. 171).

owed nothing to the foreign examples.

In the ceramics of the Dipylon, a bird perches on the neck of an oenochoe, and four horses are placed on the cover of a pyxis. The workmen later knew how to manage a more intimate union of the parts o vases, where the brush is charged with executing by itself the entire ornamentation, and those modeled in high relief with the roughing tool. Here is a pyxis, found at Thera, that terminates in the neck of a bird of prey with its beak widely opened (Fig. 168). Here is an aryballa w whose neck is formed by the head of a woman, placed between t two falling masses of a thick head of hair (Fig. 169); but there is a certain work of this ceramics assigned to the sculptor that already assumes much more importance. This is the case for a very curious monument belonging to the museum of the Louvre (Fig. 170).[1] There is seen a satyr seated against a cratera with his hands holding the handles, and towards which he seems to lean as if to drink from it. At first sight, the statuette is the part of this entirety attracting most attention. Still one is convinced on examining this piece more closely, that t there is indeed a vase, a surprise vase that had its marked p place in the hall of the feast, into which wine was poured more than once, if not to refresh the guests, at least to amuse them, according as under the pressure of the air driven from the bodw of the figurine or allowed to enter there by the vent holes, the level of the liquid was lowered or raised in the cratera (Fig. 170).

Note 3.p.317. Histoire de l'Art. Vol. VII. Figs. 44, 68.

Note 1.p.318. E. Pottier. Le satyre buveur, vase de surprise du musee du Louvre. (Bull. Corr. Hell. Vol. XIX,p.225-235; Pls. XIX, XX).

About the end of the 6 th century at Athens, the potters fashioned vases in the form of the head of a bearded man or Ethiopian, and more frequently female heads, some of which were signed by Charinos, Procles and Caliades.[2] As a type of this sort of works may be taken at the Louvre the vase, that was made perhaps at Corinth and bears the signature of Cleomenes the Athenian.[3] Like the double Hermes in marble, it is formed by the union of two back to back and fixed together, being the head of a man and that of a woman. Above these heads at their junction rises and opens the wide neck of a vase (Fig. 171).

[illegible]

[illegible]

[illegible]

[illegible]

It, it rather served to decorate one of the walls of the dining hall.

Note 2.p.318. See Klein. Griechische Vasen mit Meistersignaturen. [illegible]

Note 3.p.318. Collignon. Vase de terre cuite en forme de [illegible] *d'études grecques. Vol. II. 1895-1897. p.58-67, Pls. XVI-XVIII. Furtwängler had affirmed in the most formal manner that this* [illegible] *usly replied to this assertion by discussing separately the complaint against the authenticity of the piece; Le vase de* [illegible] *235, pls. XIII-XIV.*

We no more than ever believe that drinkers passed from [illegible] to hand a little ram in terra cotta, to the back of which [illegible] fitted the neck of a vase.[1] It is otherwise for those rhytons that seem to have enjoyed a great vogue in the course of the 5th century; there the Greek ceramist knew better how to use the elements furnished to him by the beautiful appearance of [illegible] women extended the sides of the deep goblet; they animate and [illegible] more than one guest must have left his repast; but it is certainly [illegible] were multiplied to the 4th century. As a type of these creations of a happy fancy, one can take a crouching sphynx with [illegible] Here the shoulder of the sphynx is detached and there rises [illegible] curve of the handle and the bold relief of the neck lighten the figurine and give it a kind of ascensional movement. This is further covered by that coating of milky white that [illegible] places on the clay of his statuettes. This is from [illegible]

The care and art with which were modeled the two heads give a very clear impression that Cleomenes conceived his work as a sculptor far more than as a potter. This never served as a drinking vase; it is probable that being placed on a little shelf, it rather served to decorate one of the walls of the dining hall.

Note 2.p.318. See Klein. Griechische Vasen mit Meistersignaturen. p. 214. E. Reisch. Röm. Mitt. vol. V. 1890. p. 313 et seq. Hartwig. Ephemeris. 1894. p.125.

Note 3.p.318. Collignon. Vase de terre cuite en forme de double tete signe de Cleomenes d'Athenes.(Mon. de l'assoc.p.l.enc. d'etudes grecques. Vol. II. 1895-1897. p.53-67, Pls. XVI&XVII). Furtwängler had affirmed in the most formal manner that this vase was the work of a modern counterfeiter. Pottier victoriously replied to this assertion by discussing separately the c complainst against the authenticity of the piece; Le vase de Cleomenes, reply to M. Furtwängler, in Rev. Arch. 1900,p.181-203, pls. XIII-XIV.

We no more than ever believe that drinkers passed from hand to hand a little ram in terra cotta, to the back of which was fitted the neck o a vase.[1] It is otherwise for those rhytons that seem to have enjoyed a great vogue in the course of the 5 th century; there the Greek ceramist knew better how to use the elements furnished to him by the beautiful appearance of the living form. These heads of animals, busts of men or of women extended the sides of the deep goblet; they animate and embellish the vase, without making it unsuited for its function. It is indeed a vase rather than a rhyton, a vase in which more than one guest must have left his reason; but it is difficult to recognize the same character in certain images, that were multiplied to the 4 th century. As a type of these creations of a happy fancy, one can take a crouching sphynx with g great wings and female head crowned with flowers (Fig. 172). There the shoulder of the sphynx is detached and there rises the neck of a lecythe furnished with its handle. Handle and neck are merely an ornament furnished by ceramics.The elegant curve of the handle and the bold relief of the neck lighten the figurine and give it a kind of ascensional movement. This is further covered by that coating of milky white that the coroplath places on the clay of his statuettes. This is from the

[illegible]
composite figurines, which have nothing of the vase but a [illegible]
lving appearance.[1]

Note 1.p.319. Rev. Arch. 1902.pl. XIV, 4.[2]

Note 1.p.321. As much can be said of another figurine of the same sort, that like the sphynx taken from Kertch, the [illegible] panticapea. This is a bust of Aphrodite fixed in a large [illegible] A neck, now broken, rose above her head. For a stronger rea[illegible] [illegible] same neck, a group representing Aphrodite seated on the knees of Adonis. (Rayet et Collignon. Histoire de la ceramique grecque. p.270-276, Figs. 103-105).

3. The Clay.

[illegible] were made the Greek vases. The analyses have proved everywhere the presence of the same elements, silica, alumina, iron oxi[illegible] [illegible] furnished to the mixture by each of these elements varies [illegible] in a very slight measure; but no more is required for clays [illegible] from different sources to present very different tones to the eye. With some experience, one distinguishes a fragment of a [illegible] the color of the clay tends to green, while in the second, it is a yellow-orange or a quite dark red. The red is darker as there is more oxide of iron in the clay; but still to heighten the tone, certain workshops add a coloring substance to the clay. [illegible] ed for the best that the potter could employ; but at Athens [illegible] [illegible] in the island of Ceos very near Piraeus; by special agre[illegible] made with the two other cities of the island, the Athenians were secured the exclusive right to export for their benefit all of that material, which Ceos could produce.[1]

[illegible]

Pliny attributes to the Corinthian potter Boutades the idea of mixing rubrica (red ochre) with the clay. (H.N.XXXV, 152). Attic potters only followed the example of the potters of the isthmus, but then forced the proportion of the miltos. The of [illegible] is much more colored red than that of the [illegible]

[illegible]

shop of the modeler and not that of the potter, that came these composite figurines, which have nothing of the vase but a deceiving appearance.[1]

Note 1.p.319. Rev. Arch. 1902.pl. XIV, 4.[2]

Note 1.p.321. As much can be said of another figurine of the same sort, that like the spynx taken from Kertch, the ancient Panticapea. This is a bust of Aphrodite fixed in a large shell. A neck, now broken, rose above her head. For a stronger reason was it refused to class among vases for use, in spite of the same neck, a group representing Aphrodite seated on the knees of Adonis. (Rayet et Collignon. Histoire de la ceramique grecque. p.270-276, Figs. 103-105).

3. The Clay.

Chemists have analyzed more than once the clays from which were made the Gree vases. The analyses have proved everywhere the presence of the same elements, silica, alumina, iron oxide, a little lime and magnesia. From one clay to another, the part furnished to the mixture by each of these elements varies only in a very slight measure; but no more is required for clays f from different sources to present very different tones to the eye. With some experience, one distinguishes a fragment of a Corinthian vase from a fragment of an Attic vase. In the first the color of the clay tends to green, while in the second, it is a yellow-orange or a quite dark red. The red is darker as there is more oxide of iron in the clay; but still to heighten the tone, certain workshops add a coloring substance to the c clay. We are told that the clay of cape Colias in Attica passed for the best that the potter could employ; but at Athens he mixed it with miltos, i.e., with a red ochre found in abundance in the island of Ceos very near Pireaus; by special agreements made with the two chief cities of the island, the Athenians w were ensured the exclusive right to export for their benefit all of that material, which Ceos could produce.[1]

Note 1.p.322. Suidas. See Koliades, C. I. Att. Vol. II, no546. Pliny attributes to the Corinthan potter Boutades the idea of mixing rubrica (red ochre) with the clay. (H.N.XXXV, 152). The Attic potters only followed the example of the potters of the isthmus, but then forced the proportion of the miltos. The clay of their vases is much more colored red than that of the Corinthian vases.

[illegible]

In very ancient vases, such as the Mycenian and even those o [illegible]

ed in the fractures. This is no longer the case for the [illegible]

the 6 th century. The paste is homogeneous and very fine in [illegible]

clay passed under a current of water into a series of basins there when it was decanted, allowing to fall to the bottom of these reservoirs all that of stone contained? It does not a- ear probable that even the springs brought to Athens by Peis- istratos would have had a sufficient discharge, so that in the Ceramicos, men could at all seasons practice those washings in abundance of water. I should rather believe that they used a [illegible]

a basin filled with water and there is tramped for long hours, like grapes in the harvest. In spite of the facilities afford- ed by mechanical mills, this is taken to triturate and knead kaolin in the manufacturing of Sevres. This mode of working, in spite of that it appears to be entirely primitive, is still [illegible].

4. The Shaping.

The invention of the potter's wheel dates back in a very high antiquity, much beyond Homer, to whom the potter's wheel [illegible]

axis, and which the potter puts in motion with his hand (fig. [illegible]

potter thus found both hands free to devote to the operation [illegible]

el composed of two disks connected by a vertical, the upper [illegible]

its revolution, to which the foot imparted by means of a pedal [illegible]

This coloring material was further introduced in a clay at the last moment, after that had suffered the preparation which removed all impurities contained in it on leaving the pit. In very ancient vases, such as the Mycenian and even those of the dipylon, little pebbles are mixed with the clay as observed in the fractures. This is no longer the case for the products of the workshops of Ionia, of Corinth and of Athens in t the 6 th century. The paste is homogeneous and very fine in grain. What processes were employed for that result? Was the clay passed under a current of water into a series of basins there when it was decanted, allowing to fall to the bottom of these reservoirs all bits of stone contained? It does not appear probable that even the springs brought to Athens by Pisistratus would have had a sufficient discharge, so that in the Ceramicos, men could at all seasons practice those washings in abundance of water. I should rather believe that they used a method requiring much less expenditure of liquid; this is what is termed in the workshop, tramping. The clay is thrown into a basin filled with water and there is tramped for long hours, like grapes in the harvest. In spite of the facilities afforded by mechanical mills, this is taken to triturate and knead kaolin in the manufacturing of Sevres. This mode of working, in spite of that it appears to be entirely primitive, is still that fromm which the best results are obtained.

4. The Shaping.

The invention of the potter's wheel dates back in a very high antiquity, much beyond Homer, to whom the potter's wheel suggested one of his comparisons.[1] It is seen represented in Egyptian paintings dating from the middle empire. What constitutes in its simplest form is a disk rotating on a vertical a axis,and which the potter puts in motion with his hand (Fig. 173). Then was adopted the custom of rotating the disk by a helper seated on the ground near the apparatus (Fig. 174).The potter thus found both hands free to devote to the operation of turning. Did they go farther? Did they know the double wheel composed of two disks connected by a vertical, the upper d disk bearing the mass of clay, accompanying the lower disk in its revolution, to which the foot imparted by means of a pedal a rotation more or less rapid? This arrangement has the advantage of giving the workman more control of the velocity; but

no text alludes to it, and no figured monument supplies a representation. When is seen to what certaintn of execution the Greek potter attained in the course of the 5 th century in fashioning clay, what thinness he could give the walls of his vase, one is tempted to believe that he was not ignorant of t this final perfection of the machine. The vases from which we have borrowed these images of the wheel all belong to the age of archaic painting.

Note 1.p.324. Iliad. 600.

The clay from which must come the vases is either placed directly on the disk (Fig. 173), or indeed if it be a piece of small dimensions, it is supported to be better at hand, by a chunk of clay, that in our workshops is called the mandrel.((Fig. 175). The turning is done with the left hand en the paste, while when not occupied in moving the disk, the right hand shapes or polishes the outside of the vase. It gives to that in general the desired form by means of a wooden tool, that n now bears the name of "esteque"(stick ?). While the block of paste rotates on the disk, all its surfaces successively come into contact with this calibrator, which being held fast and very straight, everywhere removes the same quantity of clay and shapes the same profile. The modeler has at hand quite an assortment of these calibrators, for the body, foot and neck. The fingers of the workman finishes the work of shaping commenced by the tool. As for the handles, they were made separately and then adjusted to the body. To fasten them was used slip, as still doen today. This connection is furnished by the same paste as the vase, but when this paste plays the part of cement, it is thinned with water and a little gum is added to it. Thus is obtained a very strong adhesion. In the course of the vicissitudes suffered by Greek vases before reaching us, when the handle has been separated by a shock from the body of the amphora or hydria, it has most frequently broken a bit of the body.

"These operations seem to be very simple; but they require a long apprenticeship for the hand to become skilful. Several m months of regular work are necessary to train a workman, that can execute in a satisfactory fashion ordinary products. Now certain antique vases, particularly cups, have a solid construction and lightness of wall that defies all comparison. The

[illegible]
cut so that the line can be followed without break and with
[illegible]
[illegible]
[illegible]
there the masterpieces are in the minority, as everywhere."[illegible]

[illegible]

The Greeks of the 5 th century appear to have been very sen-
sitive, as were the Chinese and Japanese, to those feats of
the trade that dealt with difficulties. One is tempted to bel-
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the turning, and to the beauty of the black glaze, than to the
[illegible]
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in what realizes the beauty of the work that he presents to
them. He sometimes signs alone, as if that part were by far
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monochrome vases could be taken at first sight for products of
[illegible]
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mastery, in the execution of the piece.

[illegible]

The piece being turned and shaped, while yet leaves the [illegible]
[illegible]
eration proceed? Opinions differ. According to one of the [illegible]
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ness similar to that of leather, allowing dressing, incising
and painting; it would be too fragile if completely dried. [illegible]
proves that the vases were still a little soft before placing
the decoration is, that several of them have received shocks
in transportation and in the handling of the pieces; those [illegible]
pressions are still visible in the fired pottery. Certain [illegible]

practice of attaching the handle to the inclined surface of a cup so that the line can be followed without break and with a harmonious curve is a test of skill of which few ceramists are capable. It is further unnecessary to imagine that all antique pieces are marvels of success. Many are mediocre, and there the masterpieces are in the minority, as everywhere." 1

Note 1.p.326. Pottier. Catalogue, p. 656.

The Greeks of the 5 th century appear to have been very sensitive, as were the Chinese and Japanese, to those feats of the trade that dealt with difficulties. One is tempted to believe, that in time when their taste was most delicate, they attached no less importance to the quality of the pottery than to its decoration, to the form of the piece, the perfection of the turning, and to the beauty of the black glaze, than to the image which ornamented the sides of the vase. This explains w why the potter most frequently signed beside the painter. He does not wish his patrons to mistake the part belongong to him in what realizes the beauty of the work that he presents to t them. He sometimes signs alone, as if that part were by far most important. Finally, some vases are found, that he has signed, although they present no figure to the eye, and the brush has scarcely traced on them some motives of ornament, or e even has not placed thereon the lightest touch of color. Those monochrome vases could be taken at first sight for products of an inferior order; but if the potter has inscribed his name t there, this is because he desired to call attention of the purchaser to what he has devoted he has devoted so much care and mastery, in the execution of the piece.

5. Drying and Polishing.

The piece being turned and shaped, while wet leaves the hands of the turner and fitter, needed to be dried. How did this operation proceed! Opinions differ. According to one of the most competent ceramographers air drying sufficed.[2] After some days, the clay retains an indispensable cohesion and acquires a hardness similar to that of leather, allowing dressing, incising and painting; it would be too fragile if completely dried. What proves that the vases were still a little soft before placing the decoration is, that several of them have received shocks in transportation and in the handling of the pieces; those depressions are still visible in the fired pottery. Certain chem-

[illegible]

precautions, and better incorporates with the clay. It is only [illegible]

That favorable state scarcely lasts for several days; this is [illegible]

clay slightly approaches fresco painting.

Note 1.p.328. Pottier. Catalogue, p.605.

[illegible]

Note 1.p.32[illegible]. Brongniart. I, p. 357.

[illegible]

The brush could not attack the vase as the rotation of the wheel and drying had left it. The surfaces remained granular and spotted by slight irregularities. So that the brush should be able to intervene with success, a polishing was essential to render the surfaces perfectly smooth. For that purpose must serve a bit of wood or of hard leather. This operation is represented by the painting on the bottom of a cup (Fig. 176). [illegible] ses already covered by black glaze, a cratera and an oenochoe.

6. Models and Plagiarism.

By his signature attached to the vases from which he derived [illegible] he claimed the right of paternity of all of them. The capital that he had embarked in the matter and the risks that he ran [illegible] of his helpers what he had to do to contribute to the success of the enterprise. In these conditions, he could not be uninterested in the decoration. Sometimes before becoming the mas- [illegible]

chemists in agreement with treatises on ceramics think that t the degourdi, i.e., a primary light baking was indispensable.[1] Would unburned pottery be dampened by abundant application of color like that of the grounds? Would it not melt? Consulted on this point, the tradesmen however consider that in practice, painting on clay dried in the air is easily executed with some precautions, and better incorporates with the clay. It is only necessary to seize the proper moment of drying for the painting. That favorable state scarcely lasts for several days: this is why the fabrication needs to be rapid. Thus the painting on c clay slightly approaches fresco painting.

Note 1.p.326. Pottier. Catalogue, p.656.

Note 2.p.326. Reichhold. Griechische Vasenmalerei. I. p.152.

Note 1.p.327. Brogniart. I, p. 357.

Note 2.p.327. Pottier. Catalogue. p.659-660.

The brush could not attack the vase as the rotation of the wheel and drying had left it. The surfaces remained granular and spotted by slight irregularities. So that the brush should be able to intervene with success, a polishing was essential to render the surfaces perfectly smooth. For that purpose must serve a bit of wood or of hard leather. This operation is represented by the painting on the bottmo of a cup (Fig. 176). T There is seen a workman occupied in polishing a skyphos furnished with its handles, but still without any painting. The smallness of the image does not allow the defining of the tool that he employs; but one cannot mistake there the work to which he is devoted. Before him are placed on little shelves two vases already covered by black glaze, a cratera and an oenochoe.

6. Models and Plagiarism.

By his signature attached to the vases from which he derived most pride, the foreman declared himself responsible for them; he claimed the right of paternity of all of them. The capital that he had embarked in the matter and the risks that he ran conferred on him sovereign authority over all persons in the workshop. He presided over all operations, he stated to each of his helpers what he had to do to contribute to the success of the enterprise. In these conditions, he could not be uninterested in the decoration. Sometimes before becoming the master, he had followed the trade of painter ,ike Euphronios, or indeed like Nearchos, Exekias, Douris and Myson, he decorated

with his own hands some of the vases that he had thrown on the
[illegible]
vention, for the composition of pictures, could not be left
without aid to the caprices of their invention or to the pov-
[illegible]
vases.[2] Still, the most similar copies always admit some vari-
tions in detail and differences in execution, that absolutely
[illegible]
several potteries. The mechanical and machine reproduction of
a motive appears essentially contrary to the habits of the Gr-
eek mind, and was not usual for ornaments. Sometimes a pair of
vases were made in a workshop, that consequently were made as
similar as possible; but those known to us are never identical.
The characteristic of the trade was to follow the model with
freedom, to introduce therein novel details, to transpose the-
re the elements of form to give to the entirety an air of nov-
elty. There a well endowed workman found occasion to display
qualities that called him to the attention of the master, and
that could cause him to be admitted to the honors of the sign-
[illegible]
240-241, 293, etc.

[illegible]

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reason Pottier rejects the hypothesis proposed by Reichhold,
of a model all prepared, of a vase completely executed in col-
ors, which the workmen transferred exactly, line by line,
[illegible]

with his own hands some of the vases that he had thrown on the wheel. Even when he did not combine in his sole person this t twofold talent of potter and painter, long practice had made him familiar with all the arts of design. It must be he, that for each piece or series of pieces should choose the themes treated by the painter. He doubtless did not limit himself to these brief indications. Every workshop of some importance must employ several decorators at a time. These artisans that did not all offer the same guarantees of experience and of invention, for the composition of pictures, could not be left without aid to the caprices of their invention or to the poverty of their routine. They worked from cartoons, as we say, that he had charged with that case some artist possessing his confidence, whom he could call his chief painter. That he made use of models we cannot doubt. "This is evidenced by the close resemblances in composition that many vases present,[1] and in certain cases, the repetition of the same picture on different vases.[2] Still, the most similar copies always admit some variations in detail and differences in execution, that absolutely exclude the idea of a pounced tracing reported on the walls of several potteries. The mechanical and machine reproduction of a motive appears essentially contrary to the habits of the Greek mind, and was not usual for ornaments. Sometimes a pair of vases were made in a workshop, that consequently were made as similar as possible; but those known to us are never identical.[1] The characteristic of the trade was to follow the model with freedom, to introduce therein novel details, to transpose there the elements of form to give to the entirety an air of novelty. There a well endowed workman found occasion to display qualities that called him to the attention of the master, and that could cause him to be admitted to the honors of the signature"

Note 1.p.328. Louvre. hall E. 7-8, 39-40, 38-51, 234-298, 290-291, 299, etc.

Note 2.p.328. Louvre. Hall G. 529-530; see Furtwängler-Reichhold, p. 188-190.

Note 1.p.329. Louvre. Hall F. 387-388. G. 529-530. For this reason Pottier rejects the hypothesis proposed by Reichhold, od a model all prepared, of a vase completely executed in colors, which the workmen transferred exactly, line by line, the entire arrangement to the pottery entrusted to them. (Furtwän-

(Furtwängler-Reichhold, p. 13, 25, 109. See Potties. Gaz. d. Beaux Arts. 1902,p.232).

Note 2.p.329. Pottier. Catalogue. p.660-661.

What aided the workman in that perpetual improvisation was, that no law or even no scrople of opinion condemned pirating. The idea of disloyalty and of dishonesty attached by us to this procedure was entirely unknown in antiquity. Everyone believed himself permitted to "take his property wherever he found it," as Moliere said later. In this world of Greek artists, who created forms without their imagination ever appearing wearied or exhausted, there is such a wealth of invention, that no one thought himself justified in jealously affirming his right of priority in regard to a certain type or the arrangement of figures, not to regard himself as the sole proprietor of the motive. Whoever handles the chisel, modeling tool or the brush borrowed and lent without accounting." Not only the ceramist took without shame all that suited him from works of grand art, but he pillaged his neighbors and colleagues without any fear of commercial claims. Nicosthenes copied the boats of Exechias.[3] Pamphaios copied the amphora of Nicosthenes.[4] Cachrylion imitated the ephebic scenes of Epictetos.[5] Plagiaries are continual and receive from the public only encouragement. For the manufacturers without inventive genius, this is the most convenient source of subjects. They only have to look around them to provide these."[6]

Note 3.p.329. Louvre. Hall F. 122.

Note 4.p.329. Louvre. Hall G. 2.

Note 5.p.329. Louvre. Hall G. 36.

Note 6.p.329. Pottier. catalogue, p.662. See Walters. Catalogue of British Museum. Vol. II, p. 9-31. The same. Smith. Vol. III, p. 36-37.

7. The Sketch.

In the course of the period during which the Attic workshops produced their most beautiful works, i.e., about the end of the 6 th and during the entire 5 th centuries, the ceramic painter, before having recourse to color to decorate the vases by one or more figures, usually traced on the clay a sketch that the brush then resumed, correcting and completing it. He thus sought the movements, he fixed the plan of the great lines of the composition. This was first verified thirty years since, and

[illegible]

Note 1.p.260. To Raget belongs the honor of having first
[illegible]
de la Soc. des antiquaires de France 1878. p.48.50. Presenting to the society a cup of Cachrylion, which has since entered the Louvre, he causes the noting of "traces of the sketch made by the artist. Cachrylion sought his personage on the cup itself, simply polishe. and a little soft. The point that he used at the same time that he traced the lines, slightly crushed the scarcely dried clay and slightly darkened it at the possible. Soon afterward, Petersen, who had just studied the vases of the museum of the Hermitage, called attention to the same peculia-
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times, Reichhold has furnished the most precise information as
[illegible]
took tracings of the decoration of the vases which Furtwängler wished to comprise in his great publication, he also transcri-
[illegible]

This sketch was made with a pointed instrument, probably a stick of hard wood cut at the end like our pencils. This
[illegible]
the surface of the painting. Thus it is thought to be recognized on a little utensil held by an ephebe, who is represented on a vase as painting a cup.[2]

[illegible]

The sketch traced with the point only appears on vases with red figures. One divines why the painter of the black figure has not used the same process. After the first strokes of the brush had been given, the lines that served him as guides would have been entirely covered by the black color which he applied broadly to execute his outlines. He would have very quickly lost all guiding lines. He must trace with the diluted black color a first sketch of his painting." If this were good, he allowed it to dry and covered it by a thick and definite coating. If it was bad, he removed it by a stroke of a sponge, and commenced anew. Thus a modern designer removes with his rubber the lead pencil lines. An Attic vase in the geometric style informs us in that respect.[1] The painter had sketched in pale black color oarsmen seated on their bench. Later he desired

since then numerous observations have placed it beyond doubt.[1]

Note 1.p.330. To Rayet belongs the honor of having first m mentioned the presence of the sketch on antique vases.(Bull. de la Soc. des antiquaires de France 1878. p.49.50. Presenting to the society a cup of Cachrylion, which has since entered t the Louvre, he causes the noting of "traces of the sketch made by the artist. Cachrylion sought his personage on the cup itself, simply polishe, and a little soft. The point that he used, at the same time that he traced the lines, slightly crushed the scarecely dried clay and slightly darkened it at the passage. Soon afterw.rd, Petersen, who had just studied the vases at the museum of the Hermitage, called attention to the same peculiarity.(Arch.Zeit.1879. Vasenstudien, p. 1-19). In these later t times, Reichhold has furnished the most precise information on this custom of the Attic painters of the red figure. When he took tracings of the decoration of the vases which Furtwängler wished to comprise in his great publication, he also transcribed wherever visible, the first sketch of the figure.

This sketch was made with a pointed instrument, probably a stick of hard wood cut at the end like our pencils. This tool cut into the clay while still a little soft. It left there a light trace easily distinguished by causing the light to graze the surface of the painting. Thus it is thought to be recognized on a little utensil held by an ephebe, who is represented on a vase as painting a cup.[2]

Note 2.p.330. Hartwig, in Jahrb. 1891. p.157.

The sketch traced with the point only appears on vases with red figures. One divines why the painter of the black figure has not used the same process. After the first strokes of the brus had been given, the lines that served him as guides would have been entirely covered by the black color which he applied broadly to execute his outlines. He would have very quickly l lost all guiding lines. He must trace with the diluted black color a first sketch of his painting." If this were good, he allowed it to dry and covered it by a thick and definite coating. If it was bad, he removed it by a stroke of a sponge, and commenced anew. Thus a modern designer removes with his rubber the lead pencil lines. An Attic vase in the geometric style informs us in that respect.[1] The painter had sketched in pale black color oarsmen seated on their bench. Later he desired to

move them more to the right; but he had not sufficiently erased the first sketch, whose weak outline is still visible."[2]

Note 1.p.331. Laurent. Bull. Corr Hell. 1901, p. 145,Fig. 2.

Note 2.p.331. Pottier. Catalogue. p. 665.

On the contrary, the use of the dry point was always recommended for the sketch of the figure reserved on a black ground. Assume that for this figure, to find the correct pose and the best proportions, to indicate the flow of the drapery, one would have desired to use the black color, even if much diluted with water. Where the very fine line traced by the brush had not exactly followed and covered the lines of the dry sketch, those would remain visible on the red ground; they would have made a spot and have obscured the image. Those did not have t this defect which a point incised in the clay and merely scratched it. If uncolored, only a light trace was left, so slight that for a long time it escaped the eyes of the archaeologists who studied the Greek vases.

Some vases with black figures have been mentioned, on which the execution was preceded by a sketch with the dry point,[3] but those vases are in very small number and appear to date o only from the time when was already practised painting with r red figures. When by the effect of the diversity of orders, t the workman initiated in the new technics found himself thus transferred to the ancient, he returned there with all the tricks of the hand, the tabit of which he had acquired in the trade last learned. Yet sometimes he made a distinction. On certain vases where black and red figures are placed side by side, the latter was sketched on the clay. Nothing shows a preparation of that kind for the black figure.[4]

Note 3.p.331. Pottier in Melanges Perrot, p. 272 and in Vases antiques du Louvre, p. 66,E 701. Furtwängler-Reichhold, I, 24, Pl. IV, p.165, PL XXXI, Pl. 260.

Note 4.p.331. Furtwängler-Reichhold, p.266, Pl 52.

The sketch with the point is merely the rule for Attic vases of the 5 th or 6 th first years of the 5 th century. It is very rare that on those when seen very closely, one does not succeed in distinguishing some vestiges of that sketch. In the s second half of the century, this sketch becomes more sure. Ceramic painters dispense with it more freely to resort to means increasing with them, their confidence in a professional skill

[illegible] ity was contented with a rapid and loose execution.

One can then say that the use of this method coincides with [illegible] cording to the time and to the habits peculiar to each artist, these sketches are more or less hasty, more or less complete. [illegible] A certain other man outlines the entire figure nearly to the [illegible] detail of the feet and hands. These sketches are frequently [illegible] -ture; but sometimes they even give the larger parts of the drapery and the movement of its folds (Fig. 175). A curious [illegible] curvature and the style of its paintings, it is believed [illegible] reproduce shows at one side the sketch as incised by the po[illegible] on the other being the painting as presented by the finished vase (Fig. 179). On this second image, it is inscribed then in dotted lines. What results from a comparison of the two [illegible] es is that the artist, when he has superposed the painted fig- ure on the sketch, he has everywhere tried to make the lines [illegible]

[illegible]

2. The Colors.

The palette of the painters of vases comprised only three fundamental colors:- black, white, violet red. Those tones a[illegible] not seek to introduce there the entire color scale of fresco; vermilion, blue, green and yellow, this was because these col- ors did not easily bear the degree of heat necessary for fir[illegible] the pottery. At length were found expedients for incorporat[illegible] them, and especially on vases with white ground that we see the polychromy enriched by new and vivid tints, blue, rose, brown and gold; but they also found that these colors always remained very fragile, and that their use tended to make t[illegible]

inherited from several generations of artists. For a stronger reason there is no trace of this preliminary effort in the ceramics of the Italian branches of the 4 th century. There the painter also satisfied himself more cheaply. His common facility was contented with a rapid and loose execution.

One can then say that the use of this method coincides with the most beautiful productions of the ceramists of Athens. According to the time and to the habits peculiar to each artist, these sketches are more or less hasty, more or less complete. A certain painter is satisfied to indicate by some lines which do not complete or join the entirety of the attitude (Fig. 177). A certain other man outlines the entire figure nearly to the extremities. It will be the affair of the brush to correct the detail of the feet and heads. Thise sketches are frequently l limited to placing the nudes that the brush is charged to clothe; but sometimes they even give the larger parts of the clothing and the movement of its folds (Fig. 178). A curious example of this is furnished by an unsigned amphora, that from its curvatwre and the style of its paintings, it is believed right to attribute to the workshop of Euthymides.[1] The plate that we reproduce shows at one side the sketch as incised by the point, at the other being the painting as presented by the finished vase (Fig. 179). On this second image, it is inscribed there in dotted lines. What results from a comparison of the two traces is that the artist, when he has superposed the painted figure on the sketch, he has everywhere tried to make the lines more supple, to support and smooth the outlines.

Note 1.p.332. Furtwängler-Reichhold. Pl. XXXIII, p. 173-181.

8. The Colors.

The palette of the painters of vases comprised only three fundamental colors:- black, white, violet red. Those tones sufficed for long centuries for ceramic productions. If men did not seek to introduce there the entire color scale of fresco, vermilion, blue, green and yellow, this was because these colors did not easily bear the degree of heat necessary for firing the pottery. At length were found expedients for incorporating them, and especially on vases with white ground that we see t the polychromy enriched by new and vivid tints, blue, rose, b brown and gold; but they also found that those colors always remained very fragile, and that their use tended to make the

vase an object of luxury rather than a vessel devoted to the
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[illegible]
Grecian ware, contented itself with the three colors that [illegible]
amalgamated with the clay in nearly an unalterable [illegible]
was again the consideration of the useful which decided [illegible]
the methods taken by the art.
[illegible]
the origin of Greek ceramics, then remains always the primeval
element. Employed as broad outlines on a light ground, or [illegible]
[illegible]
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constant rôle. If one sometimes tried to change the black fig-
ures to red by an overlay, these were only isolated attempts.
[illegible]
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simple series, a man (Nicosthenes or Andocides) found means [illegible]
harmonize all, to retain the black color and red figures by [illegible]
returning to the ancient system, so to speak, by making the [illegible]
ground black and retaining the tone of the red clay for the [illegible]
[illegible]
color most space on the field of the vase, that takes the dif-
[illegible]
ion see the discovery of that admirable and indestructible [illegible]
[illegible]
the peculiar character of ceramic painting in Greece.[1] It is
not doubtful that the eyes of the Greeks and of their patrons
overseas found a very special charm in that metallic gleam of
this covering. This seems by itself alone to have formed the
worth of certain vases, that mostly came from the tombs of
Vois and were vessels of Attic fabrication. On those amphoras
and oenochoes are no figures. Some are ornamented by a garland
of foliage laid on them by the brush of the gilder, as detach-
ed in light on this dark ground; but there are many pieces on
which even that ornament is wanting. They are recommended only
by the elegance of the form and the beauty of the glaze.

[illegible]
es grecques. 1883. p.383.

[illegible]
[illegible]

vase an object of luxury rather than a vessel devoted to the uses of life. The beautiful epoch of fabrication, that of the signed pottery or the 6 th and 5 th centuries preceding the Median wars, contented itself with the three colors that became amalgamated with the clay in nearly an unalterable fashion. It was again the consideration of the useful which decided here the methods taken by the art.

The beautiful black lustre, whose mastery dates from even t the origin of Greek ceramics, then remains always the primeval element. Employed as broad outlines on a light ground, or on a colored ground where the figures were reserved, and in fine lines on that reserve, it always retains until the end its predominant role. If one sometimes tried to change the black figures to red by an overlay, those were only isolated attempts, that ended nowhere. He was obliged to renounce this and to adhere to the black figure until a day, when by a solution of s simple genius, a man (Nicosthenes or Andokides) found means to harmonize all, to retain the black color and red figures by r returning to the ancient system, so to speak, by making the g ground black and retaining the tone of the red clay for the p personages; but even then, it is still the black clay which h holds most space on the field of the vase, that makes the originality of its appearance. From high Mycenaean antiquity, which saw the discovery of that admirable and indestructible material, it was this predominance of black, which constituted the peculiar character of ceramic painting in Greece.[1] It is not doubtful that the eyes of the Greeks and of their patrons overseas found a very special charm in that metallic gleam of this covering. This seems by itself alone to have formed the worth of certain vases, that mostly came from the tombs of Nola and were perhaps of Attic fabrication. On those amphoras and oenochoes are no figures. Some are ornamented by a garland of foliage laid on them by the brush of the gilder, as detached in light on this dark ground; but there are many pieces on which even that ornament is wanting. They are recommended only by the elegance of the form and the beauty of the glaze.

Note 1.p.334. Pottier. Catalogue. p.666-667; Revue des etudes grecques. 1898. p.383.

How was this glaze made? What was the composition of this c color with truly exceptional qualities of fusibility, adhesion

[illegible]
[illegible]
ists to solve it. Here is what results their analyses have ex-own, executed in more than one laboratory. They thought of the [illegible] [illegible] the head did not reach very high temperatures; but however mod-[illegible] [illegible] glaze, and it has been agreed to recognize a mineral substance, ground earths to which were added iron oxide and soda. The ox-ide gave the black coloring; the soda caused the fusion. Mang-anese was not an essential element of the mixture, as has been believed; it entered into this only in very slight quantity.[1] With the elements that analysis has distinguished in bits of that covering, men have attempted to recompose the color, [illegible] [illegible] applied the color so obtained under the direction of the [illegible] [illegible] which does not reproduce the velvety softness of the olive-green shades of the antique black."[1] There is a secret of fab-rication that has not been recovered yet.

Note 2.p.324. Engel in Revue archéol. 189-. p.256.

[illegible] *cently undertaken on this subject by an American chemist,* [illegible]

[illegible]

Note 1.p.338. Pottier. Catalogue. p. 687.

[illegible] jections sensible to the finger. Spread in a broad and thin coat, it takes an orange tone at the edges after firing; [illegible] of juvenile heads. When it has received the touch of fire in the kiln, where the flame became what the potters term [illegible]

to the clay and resistance to time? Ceramographists have not failed to propose that problem, and have called to their aid the chemists to solve it. Here is what results their analyses have shown, executed in more than one laboratory. They thought of the black sepia ejected by the cuttle-fish, that mollusk abounding in the waters of the Meditterranean,[2] but it is agreed to reject that hypothesis. Doubtless in the kiln of the Greek potter, the head did not reach very high temperatures; but however moderate it was, the fire in that kiln would have sufficed to volatilize an organic material. It is necessary to see in that glaze, and it has been agreed to recognize a mineral substance, ground earths to which were added iron oxide and soda. The oxide gave the black coloring; the soda caused the fusion. Manganese was not an essential element of the mixture, as has been believed; it entered into this only in very slight quantity.[1] With the elements that analysis has distinguished in bits of that covering, men have attempted to recompose the color, whose formula they thought themselves to possess. In the museum of the national manufactory of Sevres are vases to which was applied the color so obtained under the direction of the chemist Salvetat;[2] "but they have a hard, cold and uniform tone, which does not reproduce the velvety softness of the olive-green shades of the antique black." [1] There is a secret of fabrication that has not been recovered yet.

Note 2.p.334. Engel in Revue archaeol. 189.. b.256.

Note 1.p.335. This is the result of the researches quite recently undertaken on this subject by an American chemist, O.S. Tonks. (Experiments with the black glaze on Greek vases, in Am. Jour. Archaeol. 1908. p.417-427). Except some details, the analyses of Tonks confirm the conclusions to which Brogniart had already arrived.(Vol. I, p. 545).

Note 2.p.335. Brogniart. I, p.546, 551-554.

Note 1.p.336. Pottier. Catalogue. p. 667.

"However this may be, this black is employed in different states, which produces different tones. Very thick, it forms projections sensible to the finger. Spread in a broad and thin c coat, it takes an orange tone at the edges after firing; diluted, it turns a pale yellow and serves to indicate blond hair of juvenile heads. When it has received the touch of fire in the kiln, where the flame became what the potters term oxidizing,

it presses to red." 2

[illegible]

Unless two subjects are placed [illegible] it is clearly [illegible] the substance known under the name of colcotar. The white on antique vases is thick and creamy, of a beautiful milky tint. It is a sort of white clay a little rough. It may be asked if [illegible] of kaolin occur at several points on the coast of the Mediterranean, notably in that island of Melos from which was also [illegible] but not being able to obtain in their kilns temperatures sufficiently high to vitrify it, they employed it only in the state of powder. Those cimolian earths must be kaolin, which according [illegible] long time was used for soap the kaolin of S. Yrieix, before having the idea of using it for making porcelain after the example of the Chinese. He further gave the proof, that in antiquity, fullers were not the only artisans that utilized kaolin. This was sometimes substituted for plastic clay to furnish the material of the bodies of certain figurines.[4] Perhaps it also [illegible] had been dipped in a bath in which was suspended kaolin in very fine powder. Thus would be explained the fragility of that [illegible] it remained slightly adherent; it was detached and fell in scales. It is also probable that were obtained by means of the same substance those white retouches, that abound on the late [illegible] required the touches of color, by the aid of which it indicated the detail of the adjustments, and designed its scrolls and garlands.

[illegible]

Note 4.p.333. Eugene Piot obtained the proof of this at the cost of a statuette of his collection, a statuette from Egypt and in that fashion. A fracture of it showed a white pulverulent earth inclosed within a thick metallic glaze, that protected it from disaggregating. He caused the figurine to be placed in one of the kilns of Sevres. At a great heat, the substance

it passes to red." [2]

Note 2.p.336. Pottier. Catalogue. p.668.

Violet red and white are placed as retouches on vases. Violet red is clayey ochre colored by an iron peroxide, analogous to the substance known under the name of colcotar. The white on antique vases is thick and creamy, of a beautiful milky tint. It is a sort of white clay a little rough. It may be asked if the clay employed for this use was not frequently kaolin. Beds of kaolin occur at several points on the coast of the Mediterranean, notably in that island of Melos from which was also derive miltos or vermilion. The ancients certainly knew kaolin, but not being able to obtain in their kilns temperatures sufficiently high to vitrify it, they employed it only in the state of powder. Those cimolian earths must be kaolin, which accordng to Pliny served for cleaning fabrics.[3] In Limousin for a very long time was used for soap the kaolin of S. Yrieix, before h having the idea of using it for making porcelain after the example of the Chinese. We further have the proof, that in antiquity, fullers were not the only artisans that utilized kaolin. This was sometimes substituted for plastic clay to furnish the material of the bodies of certain figurines.[4] Perhaps it also was the material of the white coating of Attic lecythes. Before receiving the ornamentation applied by the brush, those vases had been dipped in a bath in which was suspended kaolin in very fine powder. Thus would be explained the fragility of that coating. Firing did not cause it to pass into the state of glaze; it remained slightly adherent; it was detached and fell in scales. It is also probable that were obtained by means of the s same substance those white retouches, that abound on the late vases of Apulia. From a pulp of kaolin the brush would have required the touches of color, by the aid of which it indicated the detail of the adjustments, and designed its scrolls a and garlands.

Note 3.p.336. Pliny. H.N. XXXV, 57.

Note 4.p.336. Eugene Piot obtained the proof of this at the cost of a statuette of his collection, a statuette from Egypt and in that fashion. A fracture of it showed a white pulverulent earth inclosed within a thick metallic glaze, that prevented it from disaggregating. He caused the figurine to be placed in one of the kilns of Sevres. At a great heat, the substance

of the nucleus became porcelain.

9. Bmushes and Instruments of Drawing.

"The brushes employed by the ceramic painter must be of different sizes, some thick and broad to cover the grounds and fill the black outlines, others with fine points and slended for executing the lines. The painter of black figures addet to these a metal graver for incising the opaque outline of the details of the muscles and clothing. As for the lines so admirably delicate and fine, found in the red figures, it is asked if it was just the tool with which they were executed, the problem is m much discussed. In any case, what is proved by the representations that we have of Greek decorators occupied in painting v vases is, that those painters did not hold the brush as do ours, with the fingers extendind along the handle. They took it in the fist, all the fingers being folded in the palm of the hand; (Fig. 180); Thus Japanese painters work. This pose ensures a great certainty to the stroke; it prevents trembling, so difficult to avoid with extended fingers. Modern artists have other habits and express doubts of the results that can be given by the use of this method; but it is certain that the Japanese h have employed it as well as the Greeks, one cannot say that it is not practical." [1] Further, however reduced are the images, their evidence is formal; no place is left for doubt (Fig. 181).

Note 1.p.337. Pottier. Catalogue. p. 669-670.

An entire debate now continues on the question of knowing w what idea should be formed of the tool, that allowed the painter to trace freehand the lines of the contours, so firm in t the boldness of their curves, as well as the fine and light lines that give all the modeling of the nude and the elegant sinuosities of the folds of the drapery. Men first thought of a sort of drawing pen, a reed whose end, like our metal pens, was split in two;[1] but this is not a reed, it is indeed a long and flexible stem held in the hand by an artist, on a fragment of a cylix found on the Acropolis, which decorates the reverse of a cup, on the fragments of another cylix already reproduced. (Fig. 181). Nowhere do we see appear this hypothetic reed in the images to which we refer. Men have attempted to obtain with an instrument with double point, a cut quill or split reed, l lines like those found in paintings of vases; but then have not succeeded.[1] Hence one is compelled to reject a conjecture that

found at first some support.

Note 1.p.333. Hartwig. Die Anwendung von Federfahne bei den griechischen Vasenmaler..Fig. 2. (Jahrb. 1900. p.147-167). In Fig. 181, the five fingers are extended on the brush; the artist is going to begin the work; he has not yet closed the hand on the tool that he prepares to use.

Note 1.p.339. Hartwig. p. 148.

The ceramic painter thus employed only the brush to lay the color on the clay. The fact seems well established; but there were brushes and brushes. What was the chracter of that, which on vases with red figures made proof of a suppleness and such astonishing certainty, of such marvellous virtuosity? Opinions differ on this subject; here is the hypothesis that appears to have received most favor.[2]

Note 2.p.339. The hypothesis that we first explain is that od Hartwig in the Memoir, whose titel has been given previously; we borrow from Lechat the summary given below.

"Certain birds, the martin and particularly the woodcock, have under the great feathers of the wing a little feather (only one beneath each wing), very small and very fine, whose fibres have the property of being arranged symmetrically on each side of the quill and terminate in a shart point. This is a natural brush, the finest that can be found. This feather is termed the painter's feather; for modern painters sometimes use it, notably for miniatures. It is to be presumed that the Greek painters also employed it. Certainly the finest lines of the drawings on their vases could also be produced by an artificial pencil, and it is not the fineness of these lines that alone proves the use of a feather of the woodcock; but besides they have a quality of relief, that the ordinary brush does not permit. Further, it has often been noted, that about the middle of their length, they cease to be thread-like and show a slight groove with the color at each side. In other terms, the line seems doubled, and the interval momentarily apparent between the two lines is yet not devoid of color. This irregularity is more visible in curves slightly abrupt, and cannot be explained with an ordinary brush. It is explained very well with the painterrs feather, because that has between the supple plumes its less flexible quill, that very easily and especially at the turns of the line, grazes the surface of the clay, and depositing

there the color with which it is also wetted, separates it in two by a slight groove with double banks."[1] Experiments have been made with a woodcock's feather fixed at the end of a little reed. It is affirmed, that the result is rather favorable to the hypothesis that suggested it.

Note 1.p.340. Lechat. Revue des etudes grecs.1900.p.407-408.

Still this hypothesis has found an opponent. No one has studied the painted vases with more patient and minute attention than the skilful draftsman, Reichhold, to whom we owe the accurate tracings of such a great number of beautiful paintings, which he has taken from all the museums of Europe and reproduced at actual sizes. It seems that no one has been nearer penetrating into the intimacy of the Greek ceramic painters and to surprising their secrets. Now that observer declares that he has not been able to trace with the "painter's feather" lines similar to those of the vases with red figures, lines so fine and uniform, whose slight relief examined under a lens sometimes appears as if devided by a central groove.[2] He has multiplied his researches and has long hesitated; then he has ended by pronouncing for the transformation of a brush made of hog's bristles, from which has been gradually removed the bristles, leaving only a single one, long and stiff. Charged with color, this bristle being drawn over the clay by the handle l lengthwise, it will give the lines in question.[1]

Note 2.p.340. Reichhold in Griechische Vasenmalerei. p.20-22 of text.

Note 3.p.340. The same. p. 67-71.

Note 1.p.341. The same. p.149-152.

Although the opinion expressed by such a competent judge merits serious consideration, doubts remain. The great difficulty of the problem is, that there are two unknown quantities, the nature of the instrument and that of the color for the application of which it moved.[2] For the brush to lend itself to the bold dash of the line, it is necessary for that color to be s sufficiently fluid. If on the other hand, it was too much so, it would spread into the field or the line would lack clearness. It must be confessed that this occurs in the attempts made with the "painter's feather;" there has been used with it an oil c color, a paste of black to which it has been sought to give t the necessary consistence.[3] The hypothesis of the use of a hog's

bristle removes more than one difficulty. That bristle, it is said, could charge itself with only a very small quantity of color. It would be necessary to take up more color several times to finish a line of a certain length. It is replied to that, the paintings often bear the trace of those supplies. In spite of the certainty of the joinings, one verifies by the lens that a straight line is sometimes composed of three or four lines placed end to end.[4] But this is not always the case, even for very long lines. It has again been alleged against this hypothesis, that in many paintings the tracing of the black line seems to have scratched the clay. Where on the vase, friction or shock has effaced that line in places, it is represented in the field by a light line impressed in quite a deep hollow. Consequently it has been said, that the instrument employed had a hard and not a soft point. This is not the bristle, however strong and stiff it is assumed, which could have drawn t that sunken line. Recent experiments have proved that this bristle yields and bends at contact with the clay; it does not cut into it.[5] The objection is not without reply. Slightly viscous, the color adheres to the clay. When it falls off, it takes with it some particles of the skin of the vase, which explains the superfecial line left thus on the clay. In these conditions, it is truly difficult to decide, until the time of finding the formula of the black glaze of the Greek ceramists, which still remains a mystery. Until the new order, one must limit himself to admiring the simple and delicate line, which characterizes the style of the painters of the red figure. The decorators that had acquired this practice accomplished veritable marvels of that kind. They further avoided executing in this fashion the entire design of their painting. Whether for the fine line in relief, they made use of the "painter's feather" or of the hog's bristle, for many other lines they certainly adhered to the use of a brush better filled, that gave the broader contours without projections.

Note 2. p.341. Tauser in Bull. Phil.Woch. 1902.p.1582.

Note 3.p.341. Hartwig. Anwendung etc. p.150.

Note 4.p.341. Reichhold. p.149-159. Figs. in support.

Note 5.p.341. The evidence of Tonks, Experiments, etc., is formal in that respect. Of all the learned contemporaries who have occupied themselves with Greek ceramics, Edmond Pottier

is the one that by the familiar practice, which he has [illegible]
[illegible]
[illegible]
[illegible]
[illegible]
posed. He sees difficulties in each of them; he reserves him-self and waits.

10. Execution of the Decoration.

The ornamental motives were usually executed before the fig-ures. This is demonstrated by one of the paintings most dignity representing the interior of a pottery workshop (Fig. 163). [illegible] vases that do not yet bear any personage. The inference sugges-[illegible] [illegible] il of the image, the crest of the helmet, a spear, penetrates [illegible] rary is not without example. Certain vases are mentioned [illegible] [illegible] letter were already in place.[2] But the case is very rare. It has been assumed that the foreman of the workshop employed as assistants for that work, beginners making their apprenticeship to the brush.[3] I freely admit that it was so for current prod-ucts; but on beautiful vases that could command a high price, the ornament is no less careful than the figures; it shows eq-[illegible] tion was entrusted to workmen, that had made a specialty of [illegible] of figures, there must also have been ornamentists, who in [illegible] which they knew how to draw a palmette beneath the handle, or to carry a garland around the lip of the vase, on which al-ternated the flowers and buds of the lotus. In the workshop of one Attic potter, when his industry had attained its full d-[illegible] only reached the purchaser after having passed through many hands; but each workman that concurred in the completion of the piece had his part of the initiative and of personal [illegible] tion. Doubtless, the part pertaining to the painter of orna-

is the one that by the familiar practice, which he has had with painted vases, best rivals Hartwig and Reichhold; in what results from the explanation that he has presented in this question (Catalogue, p.668-672) is, that he has not yet arrived a definite stand on the subject of the different hypotheses proposed. He sees difficulties in each of them; he reserves himself and waits.

10. Execution of the Decoration.

The ornamental motives were usually executed before the pictures. This is demonstrated by one of the paintings most clearly representing the interior of a pottery workshop (Fig. 183). There are seen workmen occupied in painting the ornaments on vases that do not yet bear any personage. The inference suggested by this illustration is confirmed by the study of the originals. In those "one frequently verifies that a certain detail of the image, the crest of the helmet, a spear, penetrates into the band of ornaments and was executed later."[1] The contrary is not without example. Certain vases are mentioned on w which some fillets and other motives of the same sort encroach on the figures, which proves that they were traced when the latter were already in place.[2] but the case is very rare. It has been assumed that the foreman of the workshop employed an assistant for that work, beginners making their apprenticeship to the brush.[3] I freelw admit that it was so for current products; but on beautiful vases that could command a high price, the ornament is no less careful than the figures; it shows equal mastery. I imagine that on these choice examples the execution was entrusted to workmen, that had made a specialty of t this part of the decoration. Since there were famous painters of figures, there must also have been ornamentists, who in the workshops of Ceramicos were known and sought for the skill with which they knew how to draw a palmatium beneath the handles, or to carry a garland around the lip of the vase, on which alternated the flowers and buds of the lotus. In the workshop of the Attic potter, when his industry had attained its full development, the division of labor was carried very far. The vase only reached the purchases after havinm passed through many h hands; but each workman that concurred in the completion of t the piece had his part of the initiative and of personal invention. Doubtless, the part pertaining to the painter of ornaments

in the execution of the vases could not be compared in importance to that taken by the painter of figures. It did not comprise the honor of the signature; but glance at the masterpieces of the Attic workshops and it suffices to demonstrate that this anonymous painter, when he had to furnish the frame of p paintings signed by a Clitias or an Ezechias, a Euphronios or a Douris, imposed on himself an effort making him a worthy collaborator of the more famous masters.

Note 1.p.342. Pottier. Catalogue. p.672-673. Louvre, hall F, 19, 20, 33, 53, 59 etc.

Note 2.p.342. Louvre, hall F. 25, 36, 38, 286, 294.

Note 3.p.342. Pottier. Catalogue. p.673.

Still, what particularly gave to the vase the character of value of a work o art, was the interest presented by the scenes figured on it, and what the artist had placed of movement and of expression in those images, of accuracy and of liberty in the interpretation of the living form. What it is then especially important to know is, how to acquit himself of his task, he took that one of his decorators on whom had devolved the p principal role, how were executed those paintings by one or s several persons, that make for us the entire value of all that pottery.

For vases with black figures, when he had traced his sketch with the brush or with the blunt point, the painter filled with thick color the whole interior of the outline thus arranged. persons and accessories were thus profiled in black on the red of the clay. This opaque contour comprised no internal details. To indicate these details, the painter armed himself with a m metal graver, and when the coating of color was dry, he incised the black to as to render visible the clay of the field in the hollow of the line. Thus were detached in light on that dark ground the muscles, the folds of the fabric and the ornaments of the costume, the arms and other objects that the persons held in their hands. This work of engraving modeled the body and designed the pose, gave play to the drapery and made the figure alive. Certain painters there made proof of an attention and a skill, truly extraordinary, while further the workmen charged with the incision showed himself needless or negligent. He accumulated faults to the point of making the silhouette almost incomprehensible.

"It has sometimes been thought that the black was fired in the kiln before the incision. That is an error for the color after firing would be hard to cut through, and the point would have traced there irregular lines with broken edges, instead of beautiful and perfect grooves that are noted there. So it occurs that the black in firing melts and runs into the incisions, which it fills in places. Consequently, the incision was made before placing it in the kiln."[1]

"It is thought that after the laying of the black and the incisions, the vase suffered a first and light firing, and that the workman then placed the retouching colors, the white and violet red, on places that he desired to enhance by a more vigorous tone. The white itself was sometimes incised to allow the black ground to reappear, on which it had been laid." [1]

Note 1.p.345. Pottier. catalogue. p.674.

In the decoration with red, reserved figures with incisions, the brush had to do it all. Once the sketch was made with the blunt point on the still slightly soft clay, the artist took a brush charged with black color and outlined the contours with a broad line intended to protect them from all slips of the b brush when it came to fill in the ground. This is attested for us by an unfinished little fragment of a cup, that belongs to the museum of Sevres (Fig. 184). The painter could take the occasion of this first outlining to slightly rectify certain parts of his sketch, a leg placed too high, an arm advanced too much, or a head too bowed. While he had the brush in his fingers, he here indicated without delay and by a bold touch on the heads, the black mass of the hair.

This preliminary work being accomplished, the painter took finer brushes and executed with black color within the space thus reserved on the clay all the internal details. There again he followed or corrected at his pleasure the traces of his sketch. The nature of the brush varied, and with it the thickness of the black, in the course of the work. Sometimes the l line is almost without thickness and continues an entire length, by means of a brush with few bristles. The line is sometimes of excessive thinness and leaves a projection sensible to the touch, which reveals the use of a special brush, of the painter's feather or the single bristle. Here the black is thick; it is thinned there. In particular, in the indication of the muscles

[illegible]
yellow in firing. Thus the black itself gives several scales
[illegible]
over the surfaces, in order to obtain different planes, [illegible]
[illegible]
[illegible]
stole followed by drops of color fallen accidentally on the
surface, that the painter must work his brush from top to bot-
tom and from right to left, the vase being laid on the side."
[illegible]

During the entire period of the vases of the severe style, the decorator only used retouches very discreetly. He demands no effect other than by the contrast of the red of the clay and the black of the color. The attention of the spectator is longer attracted to the works presented to him, except by the nobility and purity of the design. White disappeared; it will [illegible] the 5th century. As for the violet red, it likewise became quite rare, when the black figure has passed out of fashion. Yet it is sometimes resorted to for indicating narrow bands or foliage, that it is desired to accent on the black of the var.

Were these retouches laid after firing, as sometimes con- [illegible] incor-porated with the clay by penetrating its pores; thus they lack stability and scale off easily. According to all appearance, this violet and white were laid on the black before firing, and as soon as it was dry. All went together to the kiln. By melting the glaze or at least softening it, this established [illegible] slight adhesion that they possessed, they owed to the heat of the kiln.

The placing of these retouches was one of the difficulties [illegible] the red figure, once that the picture was executed by the painter of persons, all the fields of the vase were to be covered with black. This work was doubtless left to subordinate workmen [illegible] ness, their negligence risked the disfiguring of the lines.
[illegible]

is employed a black much thinned with water, that turns pale yellow in firing. Thus the black itself gives several scales of tones, that the artist ingeniously utilized and distributed over the surfaces, in order to obtain different planes, some vigorous and the others less accented. Men have thought themselves able to prove by the direction of the lines and by the slope followed by drops of color fallen accidentally on the surface, that the painter must work his brush from top to bottom and from right to left, the vase being laid on the side."[1]

Note 1.p.346. Pottier. Catalogue. p.675-676.

During the entire period of the vases of the severe style, the decorator only used retouches very discreetly. He demands no effect other than by the contrast of the red of the clay a and the black of the color. The attention of the spectator is longer attracted in the works presented to him, except by the nobility and purity of the design. White disappeared. It will reappear only on vases of the free style about the middle of the 5 th century. As for the violet red, it likewise becomes quite rare, when the black figure has passed out of fashion. Yet it is sometimes resorted to for indicating narrow bands or foliage, that it is desired to accent on the black of the hair.

Were these retouches laid after firing, as sometimes conjectured? This is scarcely probable. White and violet, applied on an underlying coat of color could not like that, become incorporated with the clay by penetrating its pores; thus they lack stability and scale off easily. According to all appearance, this violet and white were laid on the black before firing, a and as soon as it was dry. All went together to the kiln. By melting the glaze or at least softening it, this established a certain connection between it and these overlaid tones. The slight adhesion that they possessed, they owed to the heat of the fire.

The placing of these retouches was one of the difficulties in the making of wases with black figures. Under the reign of the red figure, once that the picture was executed by the painter of persons, all the fields of the vase were to be covered with black. This work was doubtless left to subordinate workmen; but still it required much care. Where these workmen were careless, their negligence risked the disfiguring of the piece. Thus we see in our galleries some vases where the brush charged

with this color has left uncovered places. On the contrary, it has elsewhere passed over the painter's design,[1] or it has touched some places reserved for the red.[2] A manufactorer that was not indifferent to the good appearance of his products knew how to avoid these negligences and bad works.

Note 1.p.347. Furtwängler-Reichhold. Pl. IV.

Note 2.p.347. Louvre. Hall G. 45.

11. The Firing.

In this cooperation of competence and concerted efforts that gave birth to the painted vase, a very important role was that of the foreman, who after having arranged in the interior of the kiln the pieces to be fired, lighted, urged or moderated the fire until the time when having finished his work, there was nothing more than to extinguish it. Final success depended on the experience and the sight of this agent. If he had an instant of forgetfulness, all the trouble was lost, that so m many skilful workmen had taken from the moment that the block of clay was placed on the disk of the wheel. Of the work that so many industrious and patient hands successively strove to embellish, there remained nothing but fragments to be thrown away.

This is because the art of the firing, if it is of all, that giving the most marvellous results by the transformations produced in the material, is also that comprising most surprises. The workman flatters himself in having by long practice reduced the fire that he manages to the role of a docile servant; but suddenly, it disconcerts him by its caprices.[3] The potter soon perceives this when he makes the first attempts in his art. In an old song that came to us among those little pieces to which is attached the name of Homer, one knows not why, the filled kiln is placed under the protection of Athena Ergane, the patroness of industrial labor. It is demanded of her to d drive from the fire all the malevolent demons, who are intent on disturbing the operations: Asbestos, "unquenchable," Smaragos, "he that causes the clay to crack," Syntrips, "the breaker," Omodamos, "the savage conqueror."

Note 3.p.347. The perfecting of the modern industry has not caused these dangers to disappear, and has not protected from mistakes. Much to the contrary, their sum has increased since ceramics has pursued more vivid and more complex colorings.

[illegible]

[illegible]

[illegible] *faience of Veraskin. Now the man that did the honors said to me, [illegible] of ten plates of a certain kind that he showed me, there was scarcely one that succeeded. This proportion would seem too great. On the other hand, touches of flame some-* [illegible]

[illegible]

This part of chance and the unforeseen is the same, whatever the intensity of the heat to which is pushed the fire of the [illegible] means of which are produced the hard earths now in common [illegible] today, faience and porcelain are fired at a temperature of 1500° to 2000° C; even these figures are exceeded. There have been made experiments on fragments of Greek pottery, having [illegible] supported by the antique clays and colors. It results that there is reason to place between 900° and 550° C the normal temperature attained in firing vases with red and with black fig- [illegible] that the clay in those potteries remains soft and easily scratched with the nail. It retains a very great porosity, so as to be sensitive to humidity, even in the glass cases of a museum. Saltpetre often forms on the vases in halls that do not regularly receive the rays of the sun.[1]

[illegible]

The apparatus that served for firing must have been very simple and have resembled what is now termed a muffle. An idea [illegible] of the Attic world. This kiln of the Greek potter is represented [illegible] ceramist's workshop. It is decorated at the top by a mask of Silenus, that plays there the part of an apotropaion. This il- [illegible] ound the kiln and sought to cause the firing to fail. At the [illegible] under which bend the shoulders of another slave can scarcely be anything but a sack of charcoal. It is necessary to [illegible]

Some years since at gulf Juan,,I visited a workshop where was imitated the Spanish-Arabic plates and the so-called Persian faience of Veramin. Now the man that did the honors said to me, that of ten plates of a certain kind that he showed me, there was scarcely one that succeeded. This proportion would even be too great. On the other hand, touches of flame sometimes gave effects that differed from those desired, yet were very happy, unforeseen effects leading to the creation of novel types.

This part of chance and the unforeseen is the same, whatever the intensity of the heat to which is pushed the fire of the kiln. The ancients never knew the firing with a great fire, by means of which are produced the hard earths now in common use. Today, faience and porcelain are fired at a temperature of 1500° to 2000° C; even these figures are exceeded. There have been made experiments on fragments of Greek pottery, having for their object to determine the average heat that could be supported by the antique clays and colors. It results that there is reason to place between 900° and 950° C the normal temperature attained in firing vases with red and with black figures. This is because the temperature was not carried higher, that the clay in those potteries remains soft and easily scratched with the nail. It retains a very great porosity, so as to be sensitive to humidity, even in the glass cases of a museum. Saltpetre often forms on the vases in halls that do not regularly receive the rays of the sun.[1]

Note 1.p.348. Pottier. Catalogue. p.677-678.

The apparatus that served for firing must have been very simple and have resembled what is now termed a muffle. An idea c can be formed of it by the Roman kilns found at various points of the Attic world. This kiln of the Greek potter is represented at the right on a hydria, which shows the interior of a c ceramist's workshop. It is decorated at the top by a mask of Silenus, that plays there the part of an apotropaion. This image was intended to frighten the evil spirits that prowled around the kiln and sought to cause the firing to fail. At the bottom are seen the flames from the hearth, that are urged by a workman with a long iron bar. Behind him the heavy burden under which bend the shoulders of another slave can scarcely be anything but a sack of charcoal. It is necessary to feed t

the fire that flames.

Superposed on the hearth built of bricks, the kiln of conical form was made of the same materials; but the external surface of that structure was doubtless covered by a thick layer of cement or of earth; the loss of heat was thus reduced to the minimum. As in our kilns, the floor of the firing chamber, of the alboratory as said today, must be pierced by holes through which the flames passed tod surrounded the pieces. Openings made in the top of the cone formed a chimney and carried away the products of combustion. Perhaps inlets in the sides for air made the draft more active. How did the Greek potter undertake to assure himself of the success of the kiln? No text informs us. For ordinary pottery, it sufficed to pile them on each other as still done now; this is what is termed firing a charge; but for vases decorated by paintings, more precautions were necessary. On the treatment to which these were subjected, we have only one statement, that furnished us by a Corinthian plaque (Fig. 185). The painter has presented here a s sort of birdseye view of the interior of a kiln in which are arranged ready for firing some 15 vases, amphoras, oenochoes and cups of various kinds. Judging by the elegance of the forms that they have received, these must be painted vases. The plaque shows them all as lying on the ground on the chamber where small intervals separate them. The position that this image s seems to give them cannot be that in which the hand of the pot- placed them before kindling the fire. Had they been laid on t the side in contact with the brick floor, a part of their ornamentation would not have felt the effect of the flame. That could not touch all surfaces of the pottery and carry all of them to the same degree of firing as when the vases were upright in the kiln. If the painter of the plaque laid them lengthwise on the ground, this was because he desired to indicate their shapes, and saw no other means for obtaining this result. We have already referred in more than one work on the arts of antiquity to many examples of these arbitrary projections, caprices of a perspective that had nothing scientific.[1] Accustomed to these methods of representation, the spectator easily seized the meaning of the image; this was all that the artist desired.

It is possible that in these workshops of Athens, where Greek

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Greek potters could not ... their vases in tiers, as it is the

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ace. They knew better how to construct the kiln and better to

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...ed or to red or yellow. What led to these accidents was not

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...ant could not ... the cause of the ...

but he observed the phenomena and learned to avoid what had

happened to his detriment. When one surveys an entire series

of vases placed in chronological order, as those arranged

... a century, he more rarely finds the trace of defects due to

the irregularity of the flame. In the period of decadence

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of colors. Art was declining; but the technics of fabrication

had not ceased to be perfected.

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often less from injuries by a badly managed fire than from the

manner in which the pieces were arranged in the kiln. For

...ony, too many pieces were placed there at once; they came to

be placed closely against each other so as to touch each other

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moments were also produced. A part of the fresh painting

vase was removed and appeared on the surface of another.

is also noted on a certain number of vases a round mark,

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applied there during the firing. It seems that these marks

respond to circular supporting rings on which the vase was

...ced in the interior of the kiln. It has occurred that other

ceramics created its masterpieces, there had been adopted for the passage of the vases to the flame, less elementary procedures than those which satisfied Corinthian fabrication. Perhaps Attic potters could arrange their vases in tiers, as it is said, on terra cotta tiles supported in seggars, that could form several superposed tiers. What seems certain is, that about the time when the red figure began to dominate, the regulation of the kiln was much better ensured than during the preceding period. Men knew better how to construct the kiln and better to proportion the heat. Many vases of the archaic style bear the marks of accidents in firing. Touches of the flame have turned black to red or yellow. What led to those accidents was not too high a temperature reached in anadvertence; it was especially by what chemists term the oxidizing flame. If by some false a art or because of a crack that opened in the wall, the external air entered the heating chamber, there was produced an escape of oxygen, which decomposed the black color. The Greek architect could not penetrate the cause of the effects of that kind, but he observed the phenomenon and learned to avoid what this repeated to his detriment. When one surveys an entire series of vases placed in chronological order, as these approach the 5 th century, he more rarely finds the trace of defects due to the irregularity of the flame. In the period of decadence on Italiote vases are perhaps more examples of these alterations of colors. Art was delining; but the technics of fabrication had not ceased to be perfected.

There have been noted on vases some other defects, that resulted less from injuries by a badly managed fire than from the manner in which the pieces were arranged in the kiln. For economy, too many pieces were placed there at once; they came to be placed closely against each other so as to touch each other. A spot was formed by a point of adherence. "Other curious phenomena were also produced. A part of the fresh painting of a vase was removed and appeared on the surface of another. There is also noted on a certain number of vases a round mark, a circle impressed on the body, as if the mouth of a vase had been applied there during the firing. It seems that these marks correspond to circular supporting rings on which the vase was placed in the interior of the kiln. It has occurred that otherw-

otherwise very careful have suffered from these contacts. Thus there is no reason to believe that Greek potters ever carried precaution so far as do modern ceramists. In contrast with constructing a well closed kiln, the latter place the porcelain in seggars, i.e., in receptacles of refractory clay, which forms a second enclosure in which the pieces are fired while sheltered from all accidents and in a very uniform temperature."-

Note 1.p.350. Histoire de l'Art. Vol. I, p.451-458, Vol. II. p. 339-346; vol. VI, p. 791;Vol. VII, p. 176-177.

Note 1.p.351. Pottier. Catalogue. p. 680.

When one frequents the museums, this is not without noting certain vases there, whose entire surface, fields as well as ornamentation, presents the same gray and dull tint. This is not due to an accident in firing. They received the hot fire of the funeral pile, or frequently after the corpse was burned there, several articles were deposited, which had belonged to the deceased. As verified in the excavations in the tumulus of the dead of Marathon and in those other Attic cemeteries, painted vases appeared among those funerary offerings.[2] It even seems proved that before delivering them to the flame, men commenced to break them, to put them forever out of use. In those small fragments have been found all the vases that served for the completion of this rite.

12. Glazings.

It has long been believed that the touch of the flame alone gave to black the brilliant and velvety tone, of which men boast, but have never succeeded in reproducing. The flame would have made the color more vivid, as it did for the enamel powders, whose dull gray is changed by the passage of the fire into gleaming and varied tints; but it has been necessary to renounce that idea. Even on leaving the kiln the black was still dead. When the white or red retouches had been superposed on the black and disappeared by wear or by accident, the color that appeared beneath was dull.[1] To a later operation after f firing, the vase owes this lustre that brightens at once the red of the clay, the black of the figures and grounds, and the retouches of polychrome pieces. This operation could not be a simple polishing. The use of a fluid lustre is betrayed by deposits appearing in places in the form of reddish lines attach-

attached to the most porous parts of the clay. The vase was m made glossy after it had cooled, just as one varnishes an oil painting today. It does not seem that this varnishing was executed with the brush. Had it been, one would find in places traces of the strokes of the brush, which is not the case. On the other hand, the reddish deposit is usually more abundant on the foot than on the rest of the vase; its presence is verified also in depressions and in the little scratches produced in the course of the fabrication. By plunging the vase in a b bath, the potter covered it with this lustre. All observed facts agree with this hypothesis of immersion, and further those men still proceed today in ceramics for applying glazes. When he dipped his pottery in that bath, the foreman took care not to allow the liquid to penetrate into the interiors of amphoras and of hydrias, of crateras and of oenochoes. A glance in the interiors of these vases suffices to recognize that the c clay there has not the same tone as on the external surfaces; it is more doll and pale. It is the same in the cracks and under the foot of the vases. During the dipping, this foot rested on the bottom of the receiver; it was removed from the action of the bath.

Note 1.p.352. This accords with what Potties has recognized. (catalogue, p.681-684). And Reichhold (p. 145, 181, 202). They both affirm that the vases owe to the application of this lustre the brilliancy of their black and that of the red of their clay.

That this glaze was applied on painted vases is what we cannot doubt; but we know its composition no more that that of t the black color. It is believed to contain mineral substances, that where found in excess, have given the reddish precipitate, whose presence we have mentioned on certain points of this pottery; but even there, the layer of lustre thus deposited on t the clay is so thin, that it has been impossible to attempt an analysis. It is supposed, a little red was mixed with this glaze, while giving more depth to the tint of the clay, it would have dulled that of the black.[1] The lustre of the Greek potters must have been transparent and colorless like our varnish, so as to brighten all tones without the risk of taking from anyone something of its freedom.

Note 1.p.353. According to Reichhold, "it is not doubtful, that after the adoption of the style with red figures, a red color was mixed with the glaze." (p. 181). If this were so, why did not this red reduce and change the black tone?

All these operations in the workshop occufied a great number of workmen, each of whom had his special task. M. Collignon a and I endeavored to reproduce in the retrospective section of the last universal exposition in Paris, the appearanme of one of those workshops (Figs. 174, 182). The workshop is covered above; but it is largely open to the day in front and at the sides. To draw the fine lines of their images, the ceramic painters needed a very free light. Our plate XVIII is a reduction of a photograph taken of that restoration. Against the wall are tables and shelves on which are placed vases in course of execution or already finished. Tools are hung against the wall. At the end and the right is a workman shaping a vase on his wheel. At the middle a woman attaches the handle to the neck of another amphora. At the front of the picture a young man is painting the ornaments that decorate the border of a cratera. As convenient, the kiln is outside the workshop. A laborer urges the fire. In reality the kiln must be farther than it is here from the room where is perfermed the work of adjusting a and painting. The sparks that make their escape from the furnace and scatter in the air should not risk spotting and dulling the surfaces of the clay.

13. Epigraphy of Vases. Inscriptions traced with the brush. Names of personages. Signatures of painters. Other texts.

Greek ceramics interests us particularly by the elegance of its fomms as by the nobility of its decoration. Yet one cannot dispense with studying the monuments from another point of view, to nitice the inscriptions scattered in very great number on the fields of its vases. This ceramics has its epigraphy, which is very rich and varied.+ Unlike Chaldea and Assyria, Greeks did not adopt plastic clay as the special depository of ideas, that it was important to transmit to contemporaries and to posterity as the guarantee of public and private agreements. To fix and perpetuate its thoughts, those of its poets, historians and philosophers, it employed papyrus. To bronze, stone and especially to marble, it entrusted the acts of public authorities, and the text of agreements between private men; but it

also wrote much on the clay of its pottery, either with the p[illegible]
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escape us, if we had for knowing them only the little that re-
mains to us of the literary work of Greek genius. Painted in-
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[illegible] l.c. 158. These inscriptions have been [illegible] *did not include in his collection the painted or engraved ins- criptions that come from the owners of the vases. He has given space only to those that he presumes came from the hands of the potters or painters. Further, he studies them from the poi[illegible]* [illegible]

When in a museum, the eye passes over a series of Greek va[illegible] what first strikes it is, that there are words written beside the figures on more than one of them. Those words sometimes indicated the subject of the painting or indeed the scene of the action.[2] Sometimes also they designate one of the accesso- ries of the picture, an altar, seat or a vase;[2] but most fre- [illegible] Where the vase of great dimensions comprises a series of pic- ures, there are many of these names. One even reads 115 on [illegible] attic cratera signed by Clitias and Ergotimos. The letters [illegible] those words are generally small. They are barely more than 1[illegible] [illegible] ced in black on the red ground. On vases with red figures o[illegible] [illegible] the black ground, or black on the red parts of the field. On the vases of the free style, they are usually traced in whit[illegible] [illegible] ber of them not a vestige of them is seen; but at least on the products of Attic workshops, it is rare that they are lack- ing where the decoration is evidence of careful execution. They will be sought in vain on white lecythes for a funerary [illegible]

also wrote much on the clay of its pottery, either with the p point of a metal tool, or with the brush of the painter. Many facts that it was charged to witness have their importance. History finds more than one statement useful, the history of an industry whose products reflect the beauty to the creations of a lost art, Grecian painting, also the history of the language and of its alphabet, and finally the history of the religious beliefs and of those myths, many of whose episodes would escape us, if we had for knowing them only the little that remains to us of the literary work of Greek genius. Painted inscriptions are far more numerous. It is proper to occupy ourselves with them first.

Note 1.p.354. These inscriptions have been gathered by Kretschmer (Die Griechischen Vaseninschriften. 1894), but Kretschmer did not inclued in his collection the painted or engraved inscriptions that came from the owners of the vases. He has given space only to those that he presumes came from the hands of the potters or painters. Further, he studies them from the point of view od the dialect and of the orthography.

When in a museum, the eye passes over a series of Greek vases, what first strikes it is, that there are words written beside the figures on more than one of them. Those words sometimes indicated the subject of the painting or indeed the scene of the action.[2] Sometimes also they designate one of the accessories of the picture, an altar, seat or a vase;[2] but most frequently, they are names of the actors themselves in the scene. Where the vase of great dimensions comprises a series of pictures, there are many of these names. One even reads 115 on the Attic cratera signed by Clitios and Ergotimos. The letters of those words are generally small. They are hardly more than 1.18 to 1.58 ins. high. On vases with black figures, they are detached in black on the red ground. On vases with red figures of the so-called severe style, they are either painted violet on the black ground, or black on the red parts of the field. On the vases of the free style, they are usually traced in white. They are further not found on all vases with figures; on a number of them not a vestige od these is seen; but at least on t the products of Attic workshops, it is rare that they are wanting where the decoration is evidence of careful execution. They will be sought in vain on white lecythes for a funerary decoratio

this is because on those the theme of the painting is not taken from mythology; it calls for no commentary.

Note 2.p.355. This krene on the Francois vase, in the picture representing polyxene at the fountain, Kallirekrene on a hydria, that represents young Athenian girls filling their urns at the fountain of Callirhoe.(Britist Museum, B, 331).

Note 3.p.355. Thus on the same Francois vase are these mentions:- thanos, seat; hydria, water vase. Elsewhere are likewise found inscribed beside the objects designated, the words stathmos, bomos, lyra, thronos. Near that of a hog is read the word sus.(Walters. Vol. II, p. 260).

Where these inscriptions are found, all that the painter seems to have intended, was to place the name near as possible to the figure to which it applied. What determined the arrangement adopted for each group of letters was only the form of t the field on which these letters had to be inscribed, and that of the free space left around the persons in the picture. No fixed rule. The inscription describes a curve on the bottom of a cup; it follows the contour of a vase. On the side of an amphora or of a hydria, it very frequently extends in a horizontal line. Elsewhere it is in the direction of the height of a vase that it is elongated; it is usually read downward. On the so-called panathenaic amphoras, the letters are sometimes arranged vertically, some below the others, kionedon (Fig. 133). On Corinthian and Chalcidonian vases, the writing often goes from right to left as in Semitic inscriptions. It is also thus in the epigraphs of some Attic vases with black figures; but the painter of vases with red figures only traces his letters from left to right.

Neither Mycenaean potters nor those of the Dipylon placed t these legends on their vases; but if they omitted them, this was only first, because they were not yet in possession of the written alphabet; second, because if they perhaps knew the principle, they did not yet voluntarily or very readily; this w was especially because that there was nothing in the ordinary themes of their paintings, which made necessary this graphic complement, or that even made its utility felt. Those themes had nothing of history nor anecdote. On the vases of Cnossos, of Phaestos and of Mycenae,were fanciful landscapes, little m more than real or factitious animals. On the vases of Athens

In the 8 th century was the representation of rites and pomps, the spectacle of which developed under the eyes of the multitude, when one of the Eupatrids died; but from the succeeding century conditions were no longer the same for the industries inspired by the models offered to them by monumental painting and sculpture. After the brilliant flowering of the epic poets, sculptors and painters were set to illustrate their fictions, to represent in their reliefs and frescos those adventures of gods and heros, that the poets had imagined, aud whose story they had varied in a thousand ways. Then about this time, the practice of writing had become common in the Greek world. The idea had then come to artists to profit by thise marvellous invention to supplement the insufficiency of the means of expression at their disposal. By the description that Pausanias has left us of the coffer of Cypselos, probably executed about the year 600, we know that the carvers of metal, ivory and wood, had the habit of inscribing their names beside the personages placed in the scene.[1] The historians of art whose evidence has come down to us through Pliny attest that the most ancient painters of frescos had employed the same procedure.[2] Why had n not the painters of vases followed this example? Their very reduced pictures were less suited than mural paintings to distinguish and to define clearly the actors in the scene by attitude, costume and accessories, given them by the work of the brush.

Note 1.p.356. Pausanias. V. 17-6.

Note 2.p.356. Pliny. H.N. XXV. 16.

In the archaic schools were made the most constant and the widest use of these inscriptions. When the ceramic painters had familiarized the public with the principal themes of their repertory, and when on the other hand to make themselves understood, they could count more on their talent as designers, they felt less imperatively the need of thus adding a name to each figure. Already they often dispensed with it on vases with red figures in the severe style, and on those in the free style, those additions became more and more rare. They are scarcely found on the Attic vases of the 4 th century, and they are more exceptional on Italian vases of the decadence.

There is another reason for the change that operates thus in the habits of ceramists. At the origin in the time of the black figure, these inscriptions served to increase the ornamentation,

ace we have found in tore teen one primitive work, and while we have formed the dread of the work.[1] Later with the sys- tem of decoration, this feeling fades and disappears.

finds its pleasure in the contrast made by the red figures on the field of a beautiful black. This field

not in violet color; but those letters do not solicit the

classic, their absence is not regretted, the further one

What we have to consider in these inscriptions is the s that they render in explaining the sense of the work of art, the part that they take in characterizing the appearance of the decoration. One can also seek their indications that cast some light on the condition and degree of culture of the arti- sts occupied in the industries of the land. Nothing is more correct than those ... The omissions of letters, the dec ... of a very capricious orthography give reason to think, the painters who wrote these on the clay had only a very med- iocre instruction. We correct after here into the detail of th peculiarities of the dialect presented by those inscriptions, nor into that of the forms in which appear the letters of the alphabet. That is a study especially in the domain of philol- gists; but even the history of ceramics has found more than one fact to utilize. During the entire duration of the archa age, each province of the Hellenic world, each group of citi one could almost say that each city had its dialect and its own alphabet. The ceramists employed this dialect and local phabet in the legends placed on the vases. It is understood what aid the archaeologists have found in those legends in c- assifying these vases, which they found heaped in confusion Etrurian cemeteries. The inscriptions read therein have bee compared with the lettery texts of the different Greek citi and the legends of their coins. By those comparisons they ha been almost always able to refer each vase to its origin, as to distinguish thus what botanists term natural families,

also like certain ornamental motives scattered on the field. By multiplyingthese, they obeyed the secret instinct whose trace we have found in more than one primitive work, and which we have termed the dread of the void.[1] Later with the new system of decoration, this feeling fades and disappears. The eye finds its pleasure in the contrast made by the red figures rising in light on the field of a beautiful black. This field does not refuse the insertion of some letters traced by the brush wet in violet color; but those letters do not solicit the eye. They do not concur in the effect of the whole. Where they are absent, their absence is not regretted, The farther one goes, the more he is accustomed to do without them.

Note 1.p.357. Histoire de l'Art. Vol. VII, p. 195.

What we have to consider in these inscriptions is the service, that they render in explaining the sense of the work of art, the part that they take in characterizing the appearance of t tee decoration. One can also seek their indications that cast some light on the condition and degree of culture of the artists occupied in the industries of the land. Nothing is more incorrect than those texts. The omissions of letters, the caprices of a very capricious orthography give reason to think, that the painters who wrote those on the clay had only a very mediocre instruction. We cannot enter here into the detail of the peculiarities of the dialect presented by those inscriptions, nor into that of the forms in which appear the letters of the alphabet. That is a study especially in the domain of philologists; but even the history of ceramics has found more than o one fact to utilize. During the entire duration of the archaic age, each province of the Hellenic world, each group of cities, one could almost say that each city had its dialect and its own alphabet. The ceramists employed this dialect and local alphabet in the legends placed on the vases. It is understood w what aid the ceramographers have found in those legends in classifying those vases, which they found heaped in confusion in Etrurian cemeteries. The inscriptions read therein have been compared with the lapidary texts of the different Greek cities and the legends of their coins. By those comparisons they have been almost always able to refer each vase to its origin, and to distinguish thus what botanists term natural families, those

of Ionian, Corinthian, Chalcidian, Beotian and Attic vases. W When on the faith of epigraphy, these families were constituted, it has most frequently been very easy to attach the anepigraphic vases to one or the other of them by comparison of the forms of the style. Thus was first established the lists of the great workshops, those which scattered their products by thousands of examples in the entire basin of the Mediterranean. This part of the task did not offer serious difficulties; but by the comparative tables that the learned ephigraphists made of the local varieties of the most ancient Greek alphabet, men have been able to divine and in a measure to affirm the existence of certain secondary workshops, that are represented in our collections by only a small number of pieces. On some vases have been found characteristics, which only occur with certain values at a single point of the continental or insular countries, among which in high antiquity was distributed the Greek race. If men had not noted those peculiarities in writing, which had not yet created its national type, they would have been ignorant that Sicyon and Argos had workshops, which did not fail to furnish their quota to the commerce in painted vases.[1]

Note 1.p.358. For Sicyon, Walters, vol. I, pa 252; for Argos, Kretschmer, p. 7-9.

Of whatever nature they may be, all inscriptions deciphered on the clay of vases, sometimes not without effort, lend themselves to observations on the language and the writing; but those texts presenting most lively interest to the historian of art are the signatures of artists, potters and painters. We shall have more than one occasion to cite them, when we survey the work of the Greek ceramists. It will suffice here to give some general indications.[2]

Note 2.p.358. The list of these signatures has been drawn up with much care after long researches in museums and collections of ceramographs by Wilhelm Klein (Die griechischen Vasen mit Meistersignaturen. 2 nf edit. 188.). This so meritorious work has only one defect, that of already dating back 23 years. Every archaeologist has since added many names on the margin of his copy of the work.

Taken in their entirety, all these incsiptions can be reduced to four different forms.

1. The manufacturer, the master potter signs alone.

2. The painter signs alone.

3. The signature announces the author as both fashioning and decorating the vase.

4. The painter signs beside the pottor.

Those forms comprise several variants, that further have no importance. Thus two or three potters among the first that employed the red figure, substitute the imperfect epoiei for the aorist epoiese.[1] This example was not followed. Very much later, the potters of Apulia and of Paestum alone returned to that imperfect, which gave them an air of modesty. The masters of the black figure liked to add me or eme to their epoinsen. It is the vase that speaks. In the 5 th century, this sort of fiction passed out of fashion. Some potters, who did not form a school, sought various equivalents for the verb poisin. One finds very rarely these variants of the ordinary form. (See text).[2]

Note 1.p.359. Andokides, Chelis and Psiax are those that employed the inperfect.

Note 2.p.359. Walters. Vol. II, p. 258.

In 1887 were counted 80 signatures of artists, that had been found on more than 400 vases. Since then have come a certain number of names by new discoveries to be added annually to these lists; but these additions have changed nothing in the inferences believed to be derived from the texts already known.

Outside Athens are found very few signatures, and most of those are the signatures of potters. Two Corinthian signatures of Timonidas and of Chares alone form an exception. The verb egrapsen is read there. The signatures only began to be in c current use in the Attic workshops, and their frequency suffices to inform us of the activity developed by that industry at Athens from the 6 th century. The manufacturers incited sales by having their patrons even distinguish in the shop of the d dealer vases from a workshop known for the careful execution of its products. In the list made of those Attic ceramists, w who thus signed their works, there are more names of potters than names of painters, especially for the 6 th century. This numerical difference is evidence of the preponderance that opinion assigned to the industrial chief. His trademark represented in the eyes of patrons what we should call the firm. If f

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[illegible]

tance than in the past. In the Athens of the Pisistratides and soon afterwards in that of Themistocles and Cimon, the ceramic painters gave their figures a nobility and purity of form to which the crush of their predecessors had not attained. Their pictures became compositions of wise and beautiful arrangement [illegible] men boasted of them. In these conditions, for vases intended [illegible] of a famous painter was no less recommendation than that of a manufacturer in vogue. It even seems that at a certain time [illegible] vessels, more prestige and effect than that of the master potter, and that it had more on the sale. The manufacturer then [illegible] loved by him. Of all vases signed by ceramics as painter, we only see ones with his own the name of the potter. His rival, the painter Euphronios signed 7 vases. On none of them is the name of a potter. Of 23 vases of the painter Epictetus published in 1887, only 3 mention a potter, Python. The painter [illegible]

If we consider the advantage that the principal manufacturers in Athens found in thus placing on their vases these certificates of origin and of authenticity, one has more trouble to [illegible] vases are in very small number in comparison to those not signed. Whether the potter did not care to place his name on [illegible] city is easily explained; but why and how it occurred that [illegible]

It is agreed to rank among the masterpieces of Greek ceramics. To judge of them by their forms and by their entire fabric, these vases are contemporary with those on which are most the names of artists, and they came from the same work- [illegible] ons believe themselves right in attributing them to a certain

from the time when began the reign of the red figure, names of painters more frequently accompany names of potters on the vases, this is because that on those vases more and more appreciated by foreigners, the decoration had assumed greater importance than in the past. In the Athens of the Pistratides and soon afterwards in that of Themistocles and Cimon, the ceramic painters gave their figures a nobility and purity of form to which the brush of their predecessors had not attained. Their pictures became compositions of wise and beautiful arrangement. These artists were compared to each other; they were discussed; men boasted of them. In these conditions, for vases intended for the local market or the markets beyond sea, the signature of a famous painter was no less recommendation than that of a manufacturer in vogue. It even seems that at a certain time t the signature of the painter had for the purchasers of those vessels, more prestige and effect than that of the master potter, and that it had more on the sale. The manufacturer then had an interest in hiding himself behind the collaborator employed by him. Of all vases signed by Euphronios as painter, o only one bears with his own the name of the potter. His rival, the painter Euthymides signed 7 vases. On none of them appears the name of a potter. On 23 vases of the painter Douris mentioned in 1887, only 3 mention a potter, Python. The painter Smicros likewise signed alone the 3 vases known to us from him.

If we consider the advantage that the principal manufacturers in Athens found in thus placing on their vases these certificates of origin and of authenticity, one has more trouble to understand why they made only a restricted use of them. Signed vases are in very small number in comparison to those not signed. Whether the potter did not care to place his name on products of the second rank, on vases made in dozens for sale cheaply is easily explained; but why and how it occurred that there is no signature of either potter or painter on many vases, that it is agreed to rank among the masterpieces of Greek ceramics? To judge of them by their forms and by their entire fabrication, these vases are contemporary with those on which are most read the names of artists, and they came from the same workshops. It is the same that among them, according to the character of the drawing and certain peculiarities in execution, ceramographs believe themselves right in attributing them to a certain

[illegible]
that he has signed. The anonymous vase rivals in all respects
the signed vases. Why has the painter done himself honor by
them, while he has disdained to inscribe his name on the
This question is frequently asked; but so far as I know, it has
[illegible].

The motive of this absence has been sought in the caprice
mood of the artist. They had inscribed or omitted their names
at the caprice of the moment.[1] Yet it is difficult to admit
that caprice played such a part in an industry, where under
the impulse of strong competition, each manufacturer had a
stant purpose to combine all to retain and increase his patr
In the conduct of his business, he must follow certain rules
whose adoption was suggested to him by the experience acqui
of the tastes of the public to which he addressed himself.
is what has been believed to be discovered some reasons
dictated the part which he had taken in this matter. "However
essential was the pottery, in which the chief of the house
undertaken no part of the work, that had been executed by his
workmen according to the current models of the workshop, it
[illegible]
why do vases that seem to us quite insignificant show the
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placed on them some novelty in form, some change in proport
[illegible]
of artistic trinkets, where the master of the workshop had
[illegible]
is ingenious and plausible. It must contain a certain part
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were at the time, when about the middle of the 5 th century
ceramic painters produced their finest works, and why they
seem entirely out of fashion in the 4 th century.

[illegible]

[illegible]

After the signatures of artists, there is the place to ment-
ion another category of inscriptions, that composed of
[illegible]
ly. On Attic vases alone is found this form. It already appear
ed on vases with black figures; but its use became much

master, whose taste and style they have determined by the vases that he has signed. The anonymous vase rivals in all respects the signed vases. Why has the painter done himself honor by t them, while he has disdained to inscribe his name on the others? This question is frequently asked; but so far as I know, it has not yet received a truly satisfactory reply.

The motive of this absence has been sought in the capricious mood of the artist. They had inscribed or omitted their names at the caprice of the moment.[1] Yet it is difficult to admit t that caprice played such a part in an industry, where under the impulse of strong competition, each manufacturer had a constant purpose to combine all to retain and increase his patrons. In the conduct of his business, he must follow certain rules whose adoption was suggested to him by the experience acquired of the tastes of the public to which he addressed himself. Here is what has been believed to be discovered some reasons that dictated the part which he had taken in this matter. "However beautiful was the pottery, in which the chief of the house had undertaken no part of the work, that had been executed by his workmen according to the current models of the workshop, it w would not seem to him worthy of his trademark. On the contrary, why do vases that seem to us quite insignificant show to the eyes the signature of the manufacturer? This is because he had placed on them some novelty in form, some change in proportions, some unusel composition. The signed vase could then be a sort of editio princeps, where the master of the workshop had introduced an element, that he judged important."[2] The hypothesis is ingenious and plausible. It must contain a certain part of truth. Yet it does not explain to us why signatures become more rare at the time, when about the middle of the 5 th century ceramic painters produced their finest works, and why they passed entirely out of fashion in the 4 th century.

Note 1.p.361. Ducati. Brigo. p.9.

Note 2.p.361. Pottier. Catalogue. p.700-701.

After the signatures of artists, there is the place to mention another category of inscriptions, that composed of proper names accompanied by the epithet calos, or cale much more rarely. On Attic vases alone is found this form. It already appeared on vases with black figures; but its use became much more

irequent on vases with red figures. It is very difficult to state what must be understood by the word kalos. Was that himage addressed only to the physical advantages, or did it indeed express admiration of a more general character, that produced by the moral qualities and the social position of the person saluted by that title, as by the beauty of features and body? perhaps it would be wrong to wish to attribute to this epithet a very precise meaning. It seems that at Athens the word kalos attached to a name had assumed in the current language a sort of vague applause.[1] It would have corresponded to our word vive in the sense employed, whenrwe vive such a one! Still, given Athenian customs, such as we know them by Aristophanes and by the Banquet of Plato, we incline to believe that the praise implied by that vive was particularly for the beautiful ephebes, ts those that after having inspired in the gymnasiums the most lively passions, who a little later when they began to count themselves men, became the favorites in fashion, no less vaunted for the elegance of their clothing and the luxury displayed, than for the perfection of their youthful forms and for the talents of a squire, proved in the periodical reviews of the Athenian cavalry. Among those to whom the ceramists had decreed this praise, it is believed to be recognized by the name borne, many persons that played their part in the history of the city, members of those old families of the Eupatrides, even after Solon, Clisthenes and Aristides had given an entirely democratic color to the constitution of Athens, that continued to enjoy much influence and prestige during the entire course of the 5 th century. In that Athens, which in the time of great ambitions and great undertakings was not yet the city of pleasure, which it would become after irreparable defeats, those young men, future captains and futore generals, w were much more popular than the courtesans more in view. In 5 558 inscriptions of this kind that had been collected in 1898 by a patient learned man are found only 30 names of women. [1] If in the epoch of Philip and of Alexander, the industry of t the painted vase had retained its ancient customs, the names of Phryne, Lais and Glycera, painters would have inscribed on the clay on which their brushes played.

Note 1.p.362. This clearly results from two passages of Aristophanes in which the poet alludes to the habit of using the

word kalos on every occasion, to show the respect and affection borne to a female, a people or even to an institution.(Acarnanians, 1,3; Wasps, 143). On the agora or the pnyx was heard t the word kalos at every moment, when there appeared a person loved by the multitude, and when the orator finished, whose o opinions it shared.

Note 1.p.333.Klein. Vasen mit Lieblinginschriften. 2 nd edit. 1898.

If many of these names of kalos are those transmitted from grandfather to grandson in the noble houses of Athens, others are far frsm having that aristocratic appearance. There are some that like Brachos, Midas and Perses, which seem to indicate a foreign origin; these must be the names of resident foreigners or perhaps of slaves. When men were accustomed to lavish these inscriptions on vases, the painters must have made a sport of it, sometimes by awarding that homage to comrades in the workshop, thus assimilating them to the celebrities of the day. It also occurred that the painter did not take the trouble to seek a name, suitable for adding the consecrated e epithet. He writes without ceremony. "The boy that I love is beautiful; the girl that I love is beautiful." (Kalos o pais, etc.). This was sufficient to evoke the image of a beautiful ephebe or of a pretty girl. The form also comprised other variants. Sometimes to the epithet kalos was added dokei, "such a one seems beautiful to me," or the words nai, naichi, "yes indeed," which gives more force to the affirmation. There is even seen on the shoulder of an oenochoe with black figures in the museum of Munich, the form develooped and takes an exceptional length. "Nicholas is beautiful; but Dorotheos also appears beautiful to me; yes indeed; still another boy is beautiful; that is Memnon, my beautiful friend."[2] One believes that he hears there the echo of a discussion aroused in one of the workshops of Ceramicos between the workmen, each of them emphasizing the rights to this praise, that the ephebe to which he was attached could have. The Attic painter then had this word kalos so much in hand, if one may so speak, that he allowed himself to apply it to the actors in the scene which he represented. Kalos Hektor is read on the field of an amphora in the Vatican which represents Hector taking leave of Hecuba in the presence of Priam. [3]

[illegible] 2. . . . [illegible] . [illegible]
[illegible] . . [illegible]
[illegible] . . . [illegible] . . . [illegible]

[illegible] came to the Attic ceramists the idea, which neither [illegible]
[illegible]
were heard everywhere in the city itself and overseas, [illegible]
foreign patrons of the potters of Ceramicos, the names of the
most beautiful sons of Athens? Was this the result of a [illegible]
-tude of interest or that of an intimate and entirely [illegible]
neous feeling? The two elements concurred in suggesting to the
this idea and in erecting this custom. "It is probable," [illegible]
been said, "that the great majority of the persons thus applau-
ded, and we know it by historical names like those of Mil-
tiades, Megacles, Leagros, Glaucon and Alcibiades, belong t[illegible]
the high society, the political of Athens. The workmen w[illegible]
corate them do not obey an entirely disinterested motive. By
placing themselves under the invocation of a certain young a-
ristocrat, whose rich horses and beauty excite public admirati-
on, they make a direct appeal to the patronage and protection
of a wealthy family. Here again we find an indication of the
subordination and patronage that indicates the modest condit-
ion of the manufacturers."[4] Doubtless they were not insensibly
to the profits, that could be derived from those compliments
and flatteries; but the calos of the Attic vases was not all
reasons of high interest. When these salutations addressed [illegible]
rently became in a way customary in the programme of the de-
coration of Attic vases, they must have expressed a sentiment [illegible]
then in all minds, in those of the poor and humble as in those
of the rich and refined, a feeling as strongly expressed by
the works of art of this people as by all its literature. If
[illegible]
almost say the cult of virile beauty, it was indeed that of
Athens of the 5 th century, when the sculptors modeled on the
frieze of the cella at the Parthenon the bodies of the horse-
of the marvellous procession, and in the pediments of the Il[illegible]
sus and Theseus, then also that of a sage like Plato, was pl[illegible]
sed to group around the Socrates of his Dialogues the [illegible]
beautiful young men of the city, and to seek the words which
best rendered the charm of their faces and attitudes, the [illegible]
of their supple members, as if sculptured by the exercise

Note 2.p.363. Otto Jahn. Beschreibung der Vasensammlung König's Ludwigs in der Pinakothek. No. 334.

Note 3.p.363. Gerhard. Auserlesene Vasenbilder. No. 189.

How came to the Attic ceramists the idea, which neither Ionians nor Corinthians had, of these laudatory inscriptions that were heard everywhere in the city itself and overseas, among foreign patrons of the potters of Ceramicos, the names of the most beautiful sons of Athens? Was this the result of a calculation of interest or that of an intimate and entirely spontaneous feeling? The two elements concurred in suggesting to them this idea and in erecting this custom. "It is probable," has been said, that the great majority of the persons thus applauded, and that know it by historictal names like those of Miltiades, Megacles, Leagros, Glaucon and Alcibiades, belong to t the high society, the political of Athens. The workmen who celebrate them do not obey an entirely disinterested motive. By placing themselves under the invocation of a certain young aristocrat, whose race horses and beauty excite public admiration, they make a direct appeal to the patronage and protection of a wealthy family. Here again we find ar indication of the subordination and patronage that indicates the modest condition of the manufacturers."[1] Doubtless they were not insessible to the profit, that could be derived from those compliments a and flatteries; but the calos of the Attic vases was not all persons of high lineage. With these salutations addressed to beauty became in a way customary in the programme of the decoration of Attic vases, they must have expressed a sentiment t then in all minds, in those of the poor and humble as in those of the rich and refined, a feeling as strongly expressed by t the works of art of this people as by all its literature. If there were ever a society, possessing the admiration, one could almost say the cult of virile beauty, it was indeed that of the Athens of the 5 th century, when the sculptors modeled on the frieze of the cella at the Parthenon the bodies of the horsemen of the marvellous procession, and in the pediments of the Ilissos and Theseus, then also that of a sage like Plato, was pleased to group around the Socrates of His Dialogues the most beautiful young men of the city, and to seek the words which best rendered the charm of their faces and attitudes, the grace of their supple members, as if sculptured gy the exercises

of the palestra.

Note 1.p.364.Pottier. catalogue. p. 706-707.

In this epigraphy of vases, the signatures of artists and t the salutations addressed to the calos form the two most interestiug series; but the brush of the decorators is diverted to scatter on the field many other inscriptions, whose variety is so great that one can scarcely group them by lists. Some allude to the purpose of the vase. On a number of cups with black figures are read appeals thus formulated:- "Hail, good wood," or;" Hail, empty this cup." On many cups with red figures is found the word prosagereyo, literally "I speak to thee." This is something like,""Good morning."[1]

Note 1.p.365. We borrow all these legends of various kinds from the list of examples given by Walters. Vol. II, p. 261-264. There will be found in the Notes references to the monuments.

The words are sometimes supposed to be spoken by one of the persons in the pictures. They are placed in the field before the head of the figure. That recalls the words which are seen inscribed on certain paintings of the middle ages on bands, t that seem to proceed from the mouths of the saints. A painter has represented a boy that has emptied the contents of an amphora into a cratera. He encourages himself to continue his work:- "Pour sweel wine," he says to himself. Elsewhere is a woman t that holdr a cup to one of her companions and says to him:- "Drink, you also." On a vase signed by Euphronios, a courtesan amuses herself by the play of cottabe, and casts on one of the guests the contents of a cup held in her hand, saying to him:- "On you, Leagros, I cast these drops of wine." On a cup, a drinker at the end of his powers extends himself on acouch, murmuring with a hiccup:- "No, I can do no more."

Sometimes the spectator seems to address one of the actors in the scene represented on the vase. Above the first in the file of three runners competing for the prize is read:- "Polymenon, thou winnest." Written near Amphiaros is the word anaba;- Mount, inviting him to take his place on his chariot. In more than one legend are divined the first words of a song that one of the persons sings with open mouth. There has been recognized on a cup the beginning of the elegy of Theognis, and on another is that of a song of some Lespian poet. Finally, there is a v vase with black figures, which represents children and men oc-

occupied in looking at a swallow, the first one seen after the winter. One child says:- "See the swallow;" to which the man replies:- "Yes indeed, by Hercules." Another child joins in t the dialogue:- "That is what it is;" he adds:- It is already spring." It would be easy to cite other inscriptions of the same kind, equally familiar and sportive. In paintings with themes taken from actual life, these legends served to explain the subject of the picture, just as for scenes drawn from the epic myths, do the names written beside the persons.

Paintings of vases have frequently been compared to modern engravings, for the reductions that they present of the works in mural painting or of paintings on wooden panels. Not alone by this trait do these paintings on clay recall our engravings. They approach them again by the part that is played there by all these inscriptions, signatures of potters or of painters, addresses to the kalos and explanatory mottos. Thus at the bottom of an engraving or lithograph is read with the name of the artist, a title indicating the subject of the work and frequently in the case of humorous drawings like those of Gavarni, Doumier or Forain, is a legend spoken by the actors in the scene represented. Sometimes even such a dedication to an importnt person causes one to think of those addressed to the kalos.

To omit nothing concerning the inscriptions painted on clay, it remains to mention those read beneath the feet of some vases,-They are only composed of two or three letters, and these letters are larger than those scattered in the field of the vase. Their signification is not well known. It is asked whether they are marks of the workshop, or if it is necessary to see there the mark of a middleman, who stamped thus the pieces purchased at the manufactory.

Except the last case, the texts of which we have given some specimens from many, have the same origin. They came from the painter. He traced them on the clay with the brush and the same colors that served to execute their decoration. They made an integral part of that decoration. Entirely otherwise is the character of the inscriptions incised with the point, which are found on a certain number of vases. Most times the maker and the painter have nothing to do with these scratches. Nearly always is recognized the hand of a third holder, the merchant who purchased the vases and sold them to the patrons, to amateur

that possessed them, that have given them or received them as presents.

14. Epigraphy of Vases. Incised Inscriptions.

There are examples where the makers incised their names in the clay instead of tracing them in color. One of the most ancient signatures is known as that of the potter Gamedes. On an oenocnoe in the Louvre, it is painted in large letters of reddish brown;on an alabaster of the British Museum it is incised. with the point.[1] In such a matter, there is no established rule. To singn his works, that he always did on the handle, the Attic potter Hieron in the full 5 th century sometimes used the brush and sometimes the point.[2] Later the potter of southern Italy had recourse to incision with the point, when that is not habitual with them, they signed their vases or placed on them the names of personages; this is the case for Assteas, Python and Lasimos.[3] There is cited a salutation of kalos, that is engraved and not painted.[4] The same procedure was adopted in the p pottery of the temple of the Cabires at Thebes for all inscriptions. In the hollows of the letters the painter has placed a white color to make them more prominent.[5]

Note 1.p.367. B.C.H.Vol. II, p. 550.

Note 2.p.367. Klein. Meistersignaturen. p. 162-163.

Note 3.p.367. Walters. History of Greek pottery.II. p.238.

Note 4.p.367. Klein. Lieblingsinschriften. p.118.

Note 5.p.367. Athen. Mitt. 1890. p.396.

These are only rare exceptions. In this list of incised inscriptions, what predominate so far are those in which the signer claims his ownership of the vase. Accompanied by the verb eimi, they give the name in the genitive of the possessor of the object. The vase speaks. It says:- "I am, I belong to such a one." Sometimes this affirmation is developed and takes the metrical form. On the foot of a cup with black figures that c came from Rhodes is read this text:- [6]

Note 6.p.367. British Museum. B, 450.

"I am the cup of beautiful Philto." Elsewhere the inscription condemns to damages the careless person, who breaks the vase or formulates an imprecation against the criminal that dares to steal it. The gift is sometimes made ao a private person; it is more frequently to a deity. At Naucratis on the sites of the temples of Aphrodite and of Apollo, also at Thebes in

the Cabires, were found on fragments of painted vases dedications of this kind. The ordinary form at Naucratis is :- "I belong to Apollo." On a panathenaic amphora, the athlete that won it as a prize incised these three words (Greek) which attest the victory won by him in the race in the men's stadium.[1] Oscan or particularly Etruscan incisions, of which several still await their explanations, seem to have disclosed either t the possessor of the vase or the deceased in whose honor, this vase was deposited on the tomb.

Note 1.p.368. Rayet-Collignon. Histoire de la ceramique grecque. p. 134.

Certain texts offer another kind of interest. Those are the ones where is recognized the hand of the maker himself or that of the buyer who came to make purchases in his warehouses. There are found monograms that it is not always possible to interpret; but frequently whether written with all the letters or abridged, the words composing those inscriptions present a very clear sense. Here is one of these inscriptions.(Greek). I.E., 6 crateres at 4 drachmas apiece, 12 cups at 3 oboluses, 20 oxides at 3 oboluses, 20 oxybapha, each worth 1 drachma and 1 obolus.[3]

Note 2.p.368. Walters. Vol. II, p.239-240.

Note 3.p.368. Pellinion is a diminutive of pella, that designates a deep cup. It is not known what were the oxides, literally"vases for vinegar." The cratera and the oxybaphon are known. We cannot admit that the figures given in this inscription represent the total cost of the purphase; for example, that he had 6 crateras for 4 drachmas, 12 cups for 3 oboluses. The hypothesis of such a low price would contradict what we know otherwise. Aristophanes indicates 3 drachmas as the average cost of a kados ; the kados was a more common vase and less elaborate than the cratera (Peace, verse 1202). In an incision read on a cup Kephison states at 1 drachma the cost of a cup, of which he declares himself the owner. He says that whoever breaks it "will have to pay a drachma." (Böckh. C. I. G. Vol. I, 545). Thus there cannot be a question of delivering 12 cups f for a round sum of 3 oboluses. On the contrary, elsewhere the figures carried in the bill seem to represent the total price of a lot. One of the inscriptions mentions 34 lecythes for 37 oboluses, and another has 13 lecythes for 11 oboluses. That

would here be a little more and there a little less than one obolus per lecythe; now by Aristophanes (Frogs, 1236), we know that for one drachma could be purchased a lecythe of the good sort. It is then necessary according to circumstances to understand, after the notes of the dealer, so much apiece and so much for all.

It has been supposed that in this inscription and in other texts of the same kind, it is necessary to see a reminder or note taken by the maker on the clay while still wet in his workshop, when he received an order.[1] What confirms this hypothesis is the fact, that in many cases the inscription is read on the foot of the vase, which has none of the shapes mentioned by the inscription. If the order were made by a private man, it might be that of an entirety, of what we should call a table service. At other times, by the diversity of the pieces comprised, it would rather seem to have corresponded to the voids m made in the shop of a dealer, by whose intermediary the painted vases were exported in all directions. One of those merchaants could inscribe on the foot of one of the vases purchased the list of the pieces which he had bought.

Note 1.p.369. Letronne. Ouvres choisies. 3 rd series. Vol. I, p. 450-459; sur les noms traces a la pointe sous les pieds de quelques vases.

These marks scarcely appeared elsewhere than on Attic vases. They are found much more frequently on the great vases, amphoras, hydrias and crateras, than on cups and the other small pieces. Very frequently is noted the use of letters belonging to the Ionian alphabet, which tends to confirm a conjecture suggested by other indications, the great part taken in the movement and progress of the ceramics of Athens by foreigners of Ionian origin.

For all these inscriptions, whether painted or incised, the similarity of the marks and of the writings sometimes allow t their comparison, and to attribute to the same epoch two vases of different styles, to assign to the same workshop two vases, one of which bears no signature of potter or painter. The study of these cursive texts so far has been merely sketched.[2] It w will have to be resumed, an accurate and complete list be made with facsimiles, of all inscriptions of this sort that can be found in public and private collections. This later will require

[illegible]

dary value of a certain vase by adding a painted inscription, an artist's signature; but in such a case, the fraud is easily discovered. Washing with alcohol will cause colors to disappear that have not been fixed by the fire of the kiln. It is not the same for the incised inscriptions. With some skill, a counter-feiter can execute them in a manner to deceive the purchaser. [illegible] ty, it needs to be very closely examined.

[illegible] sche Vasen. (In Mélanges arch. Studien dem Andenken Adolf Furt- [illegible]).

15. Social Condition of Potters and Painters of Vases.

When one measures the place that painted vases occupy in our museums, and what is made of them by the tradition of art in inventory which we draws up of the creations of the plastic ge-nius of the industrial workers, to whom we owe so many works of high interest, and that of the painters associated with their undertaking; but however legitimate this curiosity, it is … difficult to satisfy. In the rare allusions to the clay tr… [illegible]

Note 1.p.370. See the texts cited by Pottier. Catalogue.p.67…

The legendary texts give a slightly different impression. They prove that the corporation of Attic potters was admitted to the honor of dedicating exvotos on the Acropolis, beside the sculp- [illegible] tures. We know two inscriptions that are dedications of offer-ings made by athenian ceramists, Mesiades (or Mnesiades) and An- [illegible] which served to support the consecrated object. One can thus [illegible] casting its sombre note in the midst of the white statues and [illegible] fragments that have been scattered on the Acropolis like the [illegible]

long and patient researches; but it will not fail to furnish some data useful for the history of the industry of the painted vase. Whoever undertakes this labor must otherwise be on his guard. Men sometimes have been tempted to increase the mercenary value of a certain vase by adding a painted inscription, an artist's signature; but in such a case, the fraud is easily discovered. Washing with alcohol will cause colors to disappear, that have not been fixed by the fire of the kiln. It is not the same for the incised inscriptions. With some skill, a counterfeiter can execute them in a manner to deceive the purchaser. To distinguish a recent engraving from that dating in antiquity, it needs to be very closely examined.

Note 2.p.369. Rudolf Haekl. Merkantile Inschriften auf Attische Vasen. (In Münchenor arch. Studien dem Andenken Adolf Furtwänglers gewidmet. 1909. Also see Richard Schöne. Ueber einige eingerirte Inschriften griechischen Thongefässe. (In Comm. phil. in honor Th. Mommsen. 1877. p. 649-659).

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When one measures the place that painted vases occupy in our museums, and what is made of them by the tradition of art in inventory which he draws up of the creatins of the plastic genius of the industrial workers, to whom we owe so many works of high interest, and that of the painters associated with their undertaking; but however degitimate this curiosity, it is found difficult to satisfy. In the rare allusions to the clay trades found in the classical authors, there is a sort of disdain.[1]

Note 1.p.370. See the texts cited by Pottier. Catalogue.p.691.

The lapidary texts give a slightly different impression. They prove that the corporation of Attic potters was admitted to the honor of dedicating exvotos on the Acropolis, beside the beautiful works of art that encumbered the vicinity of the sanctuaries. We know two inscriptions that are dedications of offerings made by Athenian ceramists, Oesiades (or Mnesiades) and Euphronios. They are engraved on the shafts of columns and bases, which served to support the consecrated object. One can thus represent to himself some great cratera like the Francois vase, casting its sombre note in the midst of the white statues and steles that bordered the sacred way. Some of the beautiful fragments that have been gathered on the Acropolis like the pottery signed by Nearchos,[1] must have formed a part of ceramic

ex-votos, thus placed in evidence."[2] Not only the place of consecration, reserved for offerings of worth, attests already the importance of the industrial workers that used this privilege; but certain indications give reason to think they sometimes associated themselves with great artists to make their dedications. An inscription gives the name of a Nearchos who dedicated an offering in company with Antenor, son of Eumaus, who was the most illustrious sculptor of Athens during the second half of the 6 th century.[3] Unfortunately the inscription is incomplete and indicates neither the connection nor the profession of Nearchos. The Nearchos thus associated with Antenor might then be any citizen.

Note 2.p.370. C. I. A. Supp. to vol. IV. Nos.362,373(215). Compare Studniczo. Jahrb. 1887. p.135-145.

Note 1.p.371. Klein. Meistersignaturen. p. 38.

Note 2.p.371. Pottier. catalogue. p.692.

Note 3.p.371. C. I. A. No. 373 (95).

More yet can be deduced from the data furnished by the inscriptions painted and incised on the clay of vases. This data may appear at first sight in contradiction with others. The names of certain potters and painters are followed by a patronymic, Eucheios, son of Ergotimos. Ergotales and Tleson, sons of Nearchos; Euthymides, son of Polios; Hieron, son of Medon, which implies free citizens. Teisias mentions most frequently his quality of Athenaios. One even finds in a signature of the end of the 5 th century the indication of the deme; Nicias, son of Hermocles, of the deme of Anaphlystos.[4] On the other hand, on the list of the manufacturers of vases or of painted plaques, is found many names of foreign appearance:- Skythos, Lydos, Amasis, Colchos, Thrax, Brygos, Sikanos, Sikelos, etc. Certain other names, Douris, Paidicos, Epictotos, Smicros, Mys, etc. without showing a foreign origin, are not of those which we k know by authors and inscriptions, to have been in use about t that time at Athens in the world. of the true sons of the city; they make us rather think of those numerous humorous names that the caprice of the master gave to the slave. Among these manufacturers and the artists employed by them must have been more than one foreigner and more than one freedman. It is known that these domiciled foreigners were better treated in Athens than in any other Greek city, enjoyed there certain rights and had

their marked place in the religious ceremonies of the city. By their industrial and commercial activity, they were for much in the great movement of affairs, that after the Median wars contributed so greatly to make the prosperity and the power of Athens. As for the freedman, Athenian law assimilated him to the domiciled foreigner. He paid the sake tax as the latter a and had the same liberties:- could as easily attain to fortune. That is known by the example of two bankers, Pasion and Phormion, frequently mentioned in the civil pleas of Demosthenes. Both started from a servile condition, and they ended by obtaining the freedom of the city; they had taken rank among the richest financiers of Athens.

Note 4.p.371. Walters. History, etc. Vol. II, p. 253.

This must have been in general such a mixed society, that inhabited the two quarters of Athens in which was concentrated the industry of painted vases, the inner Ceramicos and the Ceramicos outside the walls. Besides some chiefs of workshops, c considered for their fortunes or their connection with the great, it was doubtless composed in the majority of foreigners or sons of foreigners, who themselves engaged their apprentices, workmen and workwomen in the lower class. The intellectual level must then have been in general very mediocre. It would be very imprudent to seek there learned men and thinkers. Some potters had education, because they made allusions to verses of Theognis and of the epic poems, where they themselves attempted to indite their inscriptions in a metrical form, as did the sculptors;[1] but I believe it necessary to adhere to a very ordinary average of instruction. Many workmen employed in this manufacture were illiterate; for on a considerable number of vases, especially in the period of black figures, the inscriptions accompanying the subjects are replaced by letters without order or even by black points.[2] The manufacturers themselves allowed the painter charged with tracing their signatures to mutilate their names.[3] Pamphaios is written Panphanos, Panphaos, Spaiphaios. On a cup of Euphronios is read the barbarism epopiesen for epoisen. Fautls in spelling of all kinds are frequent.[4] Dorian forms are frequent in inscriptions on vases and prove there were employed a number of workmen originally from Peloponessus, perhaps from Corinth. When the activity of Corinthian manufactories slackened, the artisans that no longer

[illegible]

[illegible] in the [illegible]

are [illegible] at Athens. On a vase attributed to Egypt, [illegible] another peculiarity, the [illegible] is there replaced by the [illegible]

[illegible]

[illegible]

[illegible] or even of Scythian orig[illegible]

Note 1.p.672. Hartwig. Meisterschalen, p. 255, note 2; Wal[illegible]

ers. History. Vol. II, p. 281.

[illegible]

as these simulated inscriptions rather betray the negligence of too rapid work, than prove the ignorance of the workmen.

[illegible]

Note 4.p.673. Pottier. Catalogue. p.338.

[illegible]

We know nothing of the revenues on which the manufacturers could count, nor of the salaries paid to their collaborators. In the 7th and 6th centuries, the ceramists of Ionia and of Corinth and later those of Athens, must have derived fine gains from an industry, which to sell its products did not look entirely to local sale, but also addressed itself to a [illegible] foreign clientele. Among the vases that fill the glass cases of our museums, there is but a small number that came from the same district in which they were made. Most of them were exhumed at a great distance from the sites of the cities in which they were placed on the wheel. They have been collected in the cemeteries of southern Russia, in those of the Cyrenaica, of Etruria and especially of Italy. Some have been found [illegible] the ruins of the Greek colonies of Egypt and even in the [illegible] tombs of Carthage. A commerce that had such a diversity of [illegible]

[illegible]

ful. These ceramists were private individuals very much at [illegible] whose offerings [illegible] on the Acropolis near those of the first personages of the city. If to them fell the best [illegible] the profits thus realized, the painters in the time when [illegible] role assumed importance doubtless knew how to cause themselves to be paid for the service rendered to the manufactory, by the aid lent by their talent and signature. What induces one to [illegible]

[illegible] to allow themselves the luxury of pleasures reserved [illegible]

[illegible]

found employment in the workshopsof the isthmus must seek to hire themselves at Athens. On a vase attributed to Brygos is another peculiarity. The aspirate ps is there replaced by the hard p. (Dipilos, Pilippos). The workman who thus disfigured names very common at Athens pronounced Greek badly. There is reason to believe him a Macedonian or even of Scythian origin.[1]

Note 1.p.372. Hartwig. Meisterschalen, p. 255, note 2; Walters. History. Vol. II, p. 261.

Note 2.p.372. There is further reason to admit that sometimes these simulated inscriptions rather betray the negligence of too rapid work, than prove the ignorance of the workmen.

Note 3.p.372. Klein. Meistersignaturen. p. 14.

Note 4.p.372. Pottier. Catalogue. p.696.

Note 1.p.373. Walters. History. Vol. II, p.256.

We know nothing of the revenues on which the manufactorers could count, nor of the salaries paid to their collaborators. In the 7 th and 6 th centuries, the ceramists of Ionia and of Corinth and later those of Athens, must have derived fine profits from an industry, which to sell its products did not look entirely to local sales, but also addressed itself to a rich foreign patronage. Among the vases that fill the glass cases of our museums, there is but a small number that came from the same districts in which they were made. Most of them were exhumed at a great distance from the sites of the cities in which they had been placed on the wheel. They have been collected in the cemeteries of southern Russia, in those of the Cyrenaica, of Sicily and especially of Italy. Some have been found among the ruins of the Greek agencies of Egypt and even in the cemeteries of carthage. A commerce that had such a diversity of purchasers and such distant markets was certainly very fruitful. These ceramists were private individuals very much at ease, whose offerings appeared on the Acropolis near those of the first personages of the city. If to them fell the best part of the profits thus realized, the painters in the time when their role assumed importance doubtless knew how to cause themselves to be paid for the service rendered to the manufactory by the aid lent by their talent and signature. What induces one to think that these artists sometimes earned enough money to be able to allow themselves the luxury of pleasures reseeved for wealthy persons, is the curious painting on a beautiful cratera

with red figures in the museum of Brussels. It is signed by t the painter Smicros. There are seen ephebes voluptuously lying on the couches of banquets and surrounded by courtesans (Fig. 1860).[2] Each of those persons has his name written near him on the clay. The women are called "The sinuous, the dance, the rose." The central person is placed just below the signature and bears the name of the artist himself, Smicros. The ephebe on the left is named Pheidiades, and this name is found, followed by the epithet kalos and twice repeated on another cratera that Smicros has signed. There remain but two letters of t the third ephebe. The place here attributed to the figure named Smicros, the presence of Pheidiades here, whose name reappears in another painting of the same artist, are so many indications that suggest a very specious conjecture. In this painting was represented Smicros himself giving a feast in gay c company with two of his comrades of the workshop. We are thus informed that these ceramic painters were not obscure and needy workmen penned in Ceramicos in the smoke of their kilns by the smallness of their wages. Their profits were fine enough and their social condition was sufficiently elevated, that they could on occasion, like men of the best society, pay for the luxury of rare meals, courtesans and musicians in vogue. These feasts that they loved to represent, with the folly of the joyous and noisy procession that terminated them, it was not by hearsay that they knew the arrangement. They reproduce the attitudes which the guests were caused to take by the intoxication of the cup and that of amorous desire, they were not reduced to gaze through the doorways. They had sometimes shared this intoxication. From their own memories, perhaps from sketches made at the place, when the gayety of the repast was at its highest, they designed the varied scenes of the banquet a and of the comos, the scenes in which the most skilful among them had put such a lively movement and such amusing animation.

Note 2.p.373. C. Gaspard. Le peintre ceramiste Smicros, etc. (Monuments Piot, Vol. IX,p.15-41, pls. II, III).

If the rich manufacturers and famous painters, who formed t the pick of the corporation of ceramists mingled in the movement of the Attic city, and made a figure there by the masterpieces of their professional skill, that they dedicated to Athena on the Acropolis, if then prided themselves on tasting in

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[illegible]
[illegible] of life a world a little apart, a little [illegible]
[illegible]
foreigners, freedmen and slaves, who derived their [illegible]
[illegible]
day and night [illegible] the fires of the kilns, they lived the
[illegible]
did not exclude the violence of competition, secret or ope-
[illegible]
[illegible]. They communicated or sought to steal the secrets o-
the trade, those tricks of manual skill which shortened the [illegible]
[illegible]. They borrowed or stole the moulds. They [illegible] the fin-
[illegible] vases and [illegible] their [illegible]. At the [illegible]
[illegible]
[illegible] been in the [illegible] between the adherents of the [illegible]
ancient method and the partisans of the new, when the red fi-
[illegible] came to supplant the black one! There could not fail to be
strong rivalry in these laborious swarms, [illegible] rivalries
of interest between the masters, of self respect between the
artists, between young men that had made a brilliant begin-
and the old masters, who were troubled by the increasing re-
putation of a rival, whose signature commenced to be at a pre-
[illegible]
[illegible] recorded as in the celebrated inscription on an amph-
[illegible] by Euthymides. In the field of a picture whose executi-
on does not seem to justify this boast, Euthymides has trac-
[illegible] words:- "Euthymides has never done so well!"

sallies the pleasures more frequently offered to men of high birth of opulent leisure, yet this must have been in the ordinary course of life a world a little apart, a little more closed than that of all these people, chiefs and workmen, citizens, foreigners, frredmen and slaves, who derived their subsistence from the arts of clay. Domiciled in the two quarters, where d day and night flamed the fires of the kilns, they lived there together in a comradeship, that produced familiarity, but which did not exclude the violence of competition, secret or open j jealousies. From one workshop to another, men observed and questioned. They communicated or sought to steal the secrets of the trade, those tricks of manual skell which shortened the w work. They borrowed or stole the moulds. They showed the finished vases and discussed their merit. At the hours when they left the work for meals or rest, what fine disputes there must have been in the two Ceramicos between the adherents of the a ancient method and the partisans of the new, when the red figure came to supplant the black one! There could not fail to be strong rivalry in those laborious swarms, animated rivalries of interest between the owners, of self respect between the artists, between young men that had made a brilliant beginning and the aged masters, who were troubled by the increasing reputation of a rival, whose signature commenced to be at a premium in the market. These passionate rivalries, whose echo has even reached us in the celebrated inscription on an amphora s signed by Euthemides. In the field of a picture whose execution does not seem to justify this boast, Euthymides has traced these words:- Euthymides has never done so well!"

Chapter XX. Ionian Ceramics.

I. Necessity for classifying vases in geographical order; Discoveries that have permitted finding and constituting Ionian Ceramics.

There is one sole means of classifying vases in geographical order, which renders the study easy and fruitful for the historian of art: this is to group them by natural families and by schools, as we have done for the monuments of sculpture, taking into account assured or probable sources, of the character of the alphabet employed in the inscriptions and the peculiarities of the fabrication. Even better than statues and reliefs, vases are suited to enter this geographical list.

More than ceramics, sculpture comprises rapid variations due to the originality of the temperament of the artist and to his bold initiative. There were indeed also innovating ceramists; yet as a general rula, the traditions of the workshop and the habits contracted in the course of years of apprenticeship must have imposed themselves with more authority on the makers and painters of vases, than they could do on the masters of the chisel, on statuaries that the grandeur and often the novelty of the tasks to which they were called by the orders of princes and of cities, aroused to entirely personal efforts of creative invention.

The contempt it known and is very explicable, that struck t the first antiquaries who discovered some of these painted vases, which now crowd our galleries. It was in Etruria that they were collected, in the tombs with walls covered by Atruscan inscriptions. They did not hesitate then to credit them for the industry to which they had reason to attribute the rest of the equipment of the tomb. Then was introduced into current use to designate these monuments the name of Etruscan vases. Men have scarcely dropped this habit, whatever learned men have since said and written. Half a century since, Merimee, who prided himself on being an archaeologist, gave as a title to one of his most charming works:- The Etruscan Vase.

What after the rich finds of Vulci led Gerhard and some of his contemporaries to doubt that most painted vases were made in Etruria, and to see in them merchandize imported into Tuscany, was the incontestable fact that the subjects represented

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rasope. But this being established, they were astonished to
not arrive at the same result for the industrious and commer-
[illegible]
cial... ed with the Orient, had preceded the cities of European
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...lt that there had been no Ionian ceramics, or even that it
had vegetated obscurely in a country where the other arts had
flourished with such splendor? Must it not have profited by
[illegible]

To reply to these questions otherwise than by conjectures more or less specious, it was necessary to await the evidence
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[illegible]
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There were noted in the choice of themes, in procedures of deco-
tion and in the making of ornaments and figures, more than one
peculiarity recognized elsewhere; thus from 185?, men commen-
[illegible]
[illegible]
ons and Daphnae in the Delta came to supply precious ele-
for comparison.[2] The Ionians had founded these agencies, and
Psammetichus had opened light to them in recognition of serv-
[illegible]
most of the objects discovered in the soil of these two cities
were products of Ionian industry. The event justified these
[illegible]
and worked in the dialect of Ionia. As for the
[illegible]
was immediately noted.

on those vases were nearly all borrowed from Greek mythology. Excavations then came to confirm the inferences that had been derived from these discoveries. As soon as men had begun to s seek painted vases in Greece, they were found. Soon were formed collections, like that of the Archaeological Society at Athens, containing only pieces gathered outside Italy in Greece. The sources were noted; the styles were distinguished, and men very quickly came to define by very clear characters two groups of workshops, that of the Corinthian and that of the Attic workshops. But this being established, they were astonished to not arrive at the same result for the industrious and commercial cities of insular and Asian Greece, which by the relations maintaned with the Orient, had preceded the cities of European Greece in all the paths of civilization. Was it possible to admit that there had been no Ionian ceramics, or even that it h had vegetated obscurely in a country where the other arts had flourished with such splendor? Must it not have profited by t the examples given by the same in historical painting?

To reply to these questions otherwise than by conjectures m more or less specious, it was necessary to await the evidence of the excavations and their revelations. From Rhodes came to archaeologists the first information by the memorable discoveries made there by A. Salzmann about 1860. They studied the painted vases that came in numbers from the tombs of Camiros. There were noted in the choice of themes, in procedures of execution and in the making of ornaments and figures, more than one peculiarity recognized elsewhere; thus from 188,, men commenced to speak of Ionian vases, of "local workshops of Ionia." [1] At the same time, the excavations of Flinders Petrie at Naucratis and Daphnae in the Delta came to supply precious elements for comparison.[2] The Ionians had founded these agencies, when Psammeticus had opened Egypt to them in recognition of services rendered.[3] Men could believe themselves certain in advance that most of the objects discovered in the soil of these two sites were products of Ionian industry. The event justified these c conjectures. The epigraphic texts were written with the Ionian alphabet and worded in the dialect of Ionia. As for the vases, they strongly resembled those of Rhodes and this resemblance was immediately noted.

Note 1.p.379. C. Smith. Jour. Hell. Studies.p.371 et seq.

Note 2.p.379. The excavations of Naucratis were in 1884 and 1885; those of Daphnae in 1886.

Note 3.p.379. All the texts that relate to the Greek agencies founded in Egypt in the course of the archaic age, the texts of Herodotus and of of later writers, were collected and commented on with much criticism by D. Mallet in the Memoir entitled:- Les premiers etablissements des Grecs en Egypte (7 th and 6 th centuries).(Memoirs published by the French Archaeological Mission of Cairo. Vol. XII, part I, 1893).

With the finds of Rhodes and with those of the Greek agencies in Egypt, there was a sure criterion. The evidence of the ceramics could be defined by the characteristics that distinguished it from its rivals. This point settled, the work of examination and classification was accelerated. In the entire s extent of the territories known to have been inhabited by the Ionians, and by those where the influence of poetry made itself most vividly felt during the entire duration of the archaic age, as well as the language of arts of Ionia, discoveries were multiplied. But except at Rhodes, they were reduced to very little. None or very few vases, whose fragments would lend themselves to a restoration of the whole. Nothing but fragments, mostly very small. Yet among these shards were scarcely any that did not have something to teach us. What resulted from minute examination was the unity of Ionian ceramics on the one hand, on the other its rich diversity. All this pottery has enough traits in common that one could regard them as forming a single and the same species; but unity is not uniformity. If in the series that men labored to establish, the trade is nearly the same everywhere, and if the decoration everywhere appears as inspired by the same taste, yet there are appreciable differences between one group of pottery and another. The same motive is not always presented in the same fashion. A certain theme or ornament seems to have been much in favor here, while elsewhere it is wanting or appears but exceptionally. There is a certain type that is found only in a single place. That is the case for what is called the situla, from its Latin name. Outside Daphnae, where it abounds (Figs. 187, 188), it has not been found in a single example, save a fragment that came from Camiros,

which seems to be detached from a vase of this form.[1] In the situla is recognized the clay copy of the bronze buckets used by the Egyptians, and which were very frequently represented in their paintings. If this conjecture be correct, is it not singular that the same idea did not come to the Greek potters of Naucratis?

Note 1.p.380. British Museum. Hall A. 1535.

2. Ceramics of Ionian Colonies in Egypt; Daphnae and Naucratis.

Here is how is established the lits of duly attested sources, and of the groups that can be constituted according to the indications that allow one to affirm the Ionian origin of even vases, that have been collected in the Orient very far from Ionia.

Outside Ionia at Daphnae and Naucratis in the Delta of the Nile have been collected painted vases, whose Ionian origin is most surely attested by what we know of the origin of the immigrants, who lived in those places. The first Greeks that had a fixed residence in Egypt were the Ionian mercenaries, to whom Psammeticus I about the year 650 entrusted the guard of the n narrow isthmus by which Africa is foined to Asia. He cantoned them in what Herodotus and Diodorus called the Stratopeda between the Pelusiac branch of the Nile and lake Menzaleh. In the vicinity of the fortified camp was created a city, in which is believed to be recognized the daphnae of Herodotus, which he calls Pelusiac. This city, which seems to contain about 20,000 souls, must be inhabited by a mixed population, where the merchants of very diverse nationalities sold to the soldiers provisions, arms, objects of luxury or fancy, and provided for t their pleasures. Natives and Syrians lived there side by side with Hellenes from Asia and the islands; but those were attracted by the presence of their mercenary compatriots, and must form the principal element of this agglomeration." This is what the many fragments of painted vases sufficed to indicate, that have been collected at several points of the ground formerly occupied by the city and the camp. They are there mixed with shards of ordinary pottery without any ornament, found everywhere in Egypt.

Note 1.p.381. Herodotus. II, 30, 10(. An alteration of the ancient name is thought to be found in the name of Tell-el-

Deffeneh, now borne by the hill made of the ruins of the ancient brick fort. This etymology has been contested, but it seems without good reasons.

Note 2.p.381. Mallet. Les premiers etablissements. p. 58.

On these painted vases, the field on which the figures and ornaments are detached, and which are executed in black on reddish brown with touches of purple, is covered by a coating of creamy color. All this pottery having been broken into small bits, men have been able to restore partially but very few vases. Here are the principal pieces that are mentioned. First this bucket, whose type is found only at Deffeneh (Fig. 187), then amphoras where all the body is decorated by images extending in circular bands superposed over each other upward. Below is a series of the flowers and buds of the lotus. Above are p palmatiums and then a file of ibexes. On the shoulder is a row of birds. On the neck is a lattice where large black points r represent the knots of the little cords of the band.(Fig.189).[1]

Note 1.p.382. See Deffeneh. Pl. 28, 1, 4. Two other amphoras of the same type, but with more simple decoration.

What would give reason to think that most of these vases were made at Daphnae itself are the types and motives that the potter has borrowed from Egypt. The form of the situla is that of the bronze bucket, that is often found represented in the Egyptian reliefs. It is certainly a motive of the same origin as the hawk placed on a basket (Fig. 190).[2] On another fragment is seen a nude man running and brandishing a club, the ordinary weapon of the fellahs of the valley of the Nile;[3] but the themes where recognizable are nearly all those familiar to the Greek ceramist. Typhon and Boreas are on a situla (Figs. 187, 188); on another is the Chimera.[4] Elsewhere is the Gorgon.[5] These are processions, scenes of combat or of the chase.[6] Is it an amazon or an Artemis huntress, that should be recognized in a woman that appears nude, and who mounts astride a horse, preceded by a man with a great painted beard, armed with a spear? A wolf walks beside the horse.[7] Everywhere are sphynxes and passing animals, bulls, stags, panthers and birds. Representations of Bacchic scenes with Silenuses are not rare.

Note 2.p.382. F. Petrie. Deffeneh. Pl.XXV,1; XXVI, 1.

Note 3.p.382. The same. Pl. XXVI, 3.

Note 4.p.382. The same. Pl. XXVI, 8.

Note 5.p.382. The same. Pl. XXVI, 10.

Note 6.p.382. The same. Pl. XXX.

Note 7. p. 382.The.same. Pl. XXIX, 4.

It was at first believed that all the painted pottery of Daphnae dated from the 7 th or the first years of the 6 th centuries.[8] The site of Daphnae had been abandoned, when Amasis undertook to cause the evacuation of the stratopeda of the Egyptian frontier, and to recall from it the Greek mercenaries to group them around Memphis.[1] This was perhaps to firce the conclusion that is based on an inference from the text of Herodotus. There occurred through the Pelusiac mouth of the Nile too active a movement of merchandise, so that Daphnae did not survive as a much frequented port the departure of the foreign garrison. A more careful study of the pottery gathered in that p place has fully confirmed that conjecture. It tends to cause to be believed, that under Amasis himself there remained at Daphnae many Greeks, makers or at least purchasers of painted vases.[2] This study has demonstrated that it is proper to distin guish two ceramics at Daphnae, that do not date from the s same time. The first that may be called archaic, is represented by the buckets with black ground and by the amphoras with friezes of passing animals. It is made of carelessly prepared clay and is coated with a white glaze. In the products of the second, the clay is much finer in grain, and it has received no coating on the fields. It everywhere retains the yellowish red tint g given to it by the firing.

Notes 1. p.383. Herodotus. II, 154.

Note 2.p.383. Dümmler. Zu den griechischen Vasen von Tell D Defenneh. (Jahrb. Vol. X. p. 35-36).

Finally, what suffices to prove that this pottery dates from the last period of the development of Ionian art is the fact, that to indicate the internal details of the image, the painter there uses incised lines. Now Ionian decorators did not begin to incise the clay till very late, when the diffusion and the vogue of corinthian pottery had given them the idea of preferring this more rapid procedure to that of reserved lines a and white retouches. These vases cannot be earlier than the s second half of the 6 th century. The character by which they indeed remained Ionian is the taste shown by the painter for the richness and diversity of colors. In his paintings on the

yellowish ground are depicted the figures of dark red, ver-
ging to violet in places. The flesh of men is brown and that
of women is white. In one of these fragments the dresses are
dotted with white spots, and white crosses ornament the tunic
[illegible]

On the monsters and hydras of which we have but slight rem-
[illegible]
ferred by referring to a little group of vases found in Ita-
[illegible]
are were made those hydrias so designated? It is unknown, a[illegible]
it is also impossible to affirm that the polychrome pottery [illegible]
which we have given a specimen was made at Daphnae. It coul[d]
have been imported from some workshop to be sought on the As[ia]
coast or in one of the adjacent islands. However that may be,
the resemblance that we notice has its interest. It is an
indication to invoke in favor of the hypothesis, that attribu-
tes vases to an Ionian workshop, that have been collected on
diverse points.

Another Egyptian site, that of Naucratis, has supplied a [illegible]
greater number of painted vases than Daphnae, better [illegible]
and more varied in form and decoration. This is because Nau[cra]-
tis has had a very different importance and a much longer pr[os]-
perity than Daphnae, that it survived and ceased to live [illegible]
[illegible]
[illegible] conditions of commercial... Very early and perhaps [illegible]
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the an agency, which they had enclosed by a rampart to prot[ect]
[illegible]
there. This was what was called the wall of the Milesians. [1]
[illegible]
[illegible]
[illegible] of the country, the Milesians were emboldened to leave the
coast and to found Naucratis in the midst of the land on th[e]
left bank of the Canopic branch of the Nile, which had s[illegible]
depth of water to offer a passage to the largest ships of c[illegible]
By this arm of the river, Naucratis was in direct connectio[n]
[illegible]
indications, those derived from the texts like those furnish[ed]
[illegible]

yellowish ground are detached the figures of dark red, which tends to violet in places. The flesh of men is brown and that of women is white. In one of these fragments the blanket of a horse has white spots, and white crosses ornament the tunic of the woman that springs into her chariot.(Fig. 191).

On the amphoras and hydrias of which we have but slight remains, the decoration presents an appearance recalling that offered by painting in a little group of vases found in Italy, we mean that which ceramographs call the hydrias of Caere. Where were made those hydrias so designated? It is unknown, and it is also impossible to affirm that the polychrome pottery of which we have given a specimen was made at Daphnae. It could have been imported from some workshop to be sought on the Asian coast or in one of the adjacent islands. However that may be, the resemblance that we mention has its interest. It is another indication to invoke in favor of the hypothesis, that attributes vases to an Ionian workshop, that have been collected on distant Etruria.

Another Egyptian site, that of Naucratis, has supplied a much greater number of painted vases than Daphnae, better preserved and more varied in form and decoration. This is because Naucratis has had a very different importance and a much longer prosperity than Daphnae, that it attracted and caused to live in Egypt a much greater number of Greek immigrants, in better defined conditions of permanency. Very early and perhaps from t the end of the 8 th century, the Miletans had established in the west of the Delta at the mouth of the little river Bolbitine an agency, which they had enclosed by a rampart to protect it from pillage of the merchandise, which they had deposited there. This was what was called the wall of the Miletans. [1] When the call addressed by Psammeticus to the multitude of foreign hoplites had accustomed the Greeks to travel in the interior of the country, the Miletans were emboldened to leave the coast and to found Naucratis in the midst of the land on the left bank of the Canopic branch of the Nile, which had sufficient water to open a passage to the largest ships of commerce. By this arm of the river, Naucratis was in dorect connection with Sais, that had become the capital of Egypt. Different indications, those derived from the texts like those furnished by the result of the excavations, give reason to think that

the creation of the Milesian agency dated from the reign of [illegible]
[illegible]
to have been destroyed at the end of a certain time by a great
[illegible]
[illegible]
a part of the area on which are scattered the ruins of the [illegible]
great city, there is nearer than a thick layer of rubbish, a
layer of ashes and of objects that appear to have been calcin-
ed by a violent fire.

[illegible]

[illegible] lized? We do not know; but what is known from Herodotus, and a few are opened for Naucratis under the reign of Amasis, the [illegible] Pharaoh (569-526). To Naucratis he sent all Greek immigrants, who desired to have their part in the profits [illegible] [illegible] that presented themselves for this purpose. He thus assured [illegible] to them nearly all the commerce to pass through [illegible] Greeks. To the Greeks established there under the protection of the royal officers he granted a sort of monopoly, that [illegible] very rapidly. Naucratis became a city of business and [illegible], luxury and pleasure, when attracted at the beginning of their travels, all Greeks, merchants or mere observers, that came to visit Egypt. More than those of Corinth, the courtesans of Naucratis made a scandal by their wealth and prodigality.[2]

Note 1.p.286. Herodotus. II, 178-179.

Note 2.p.[illegible]. [illegible]. II, [illegible].

The Milesians saw themselves compelled by that influx of rivals to give place to the newcomers near them. These formed [illegible] at Naucratis, an association with its elective [illegible] [illegible] resulted in an enclosure termed the Hellenion, that has been recognized in the foundations forming a vast quadrilateral [illegible] [illegible] ties, Rhodes, Cnidos, Halicarnassus and Phaselis, and [illegible] the Aeolian city of Mitylene; but the Milesians, who were [illegible] not resigned with very good grace to the division of [illegible]

the creation of the Miletan agencydated from the reign of Psammeticus. This first Naucratis was entirely Miletan and appears to have been destroyed at the end of a certain time by a great general conflagration. At Tell-el-Oebirich, where has been recognized without possible hesitation the site of this city, on a part of the area on which are scattered the ruins of the ancient city, there is deeper than a thick layer of rubbish, a layer of ashes and of objects that appear to have been calcined by a violent fire.

Note 1.p.384. Strabo. XVII, 18.

When did the Miletans rebuild their houses and destroyed edifices? We do not know; but what is known from Herodotus, that a new era opened for Naucratis under the reign of Amasis, the philhellenic Pharoah (569-526). To Naucratis he sent all Greek immigrants, who desired to have their part in the profits that the Egypto-Greek commerce had been worth to the Miletans for more than a century.[1] Amasis made concessions of lands to all that presented themselves for this purpose. He took measures intended to cause nearly all this commerce to pass through Naucratis. To the Greeks established there under the protection of the royal officers he granted a sort of monopoly, that enriched them very rapidly. Naucratis became a city of business and industry, luxury and pleasure, when stopped at the beginning of their travels, all Greeks, merchants or mere observers, that came to visit Egypt. More than those of Corinth, the courtesans of Naucratis made a scandal by their wealth and prodigality.[2]

Note 1.p.386. Herodotus. II, 178-179.

Note 2.p.386. The same. II, 135.

The Miletans saw themselves compelled by that influx of arrivals to give place to the newcomers near them. These formed an amphictyon at Naucratis, an association with its elective magistrates, the overseers of commerce. These delegates held their meetings in an enclosuse termed the Hellenion, that has been recognized in the foundations forming a vast quadrilateral on the ground. Forming a part of this association were four Ionian cities, Chios, Teos, Phocea and Clazomenes, four Dorian cities, Rhodes, Cnidos, Halicarnassus and Phaselis, and finally the Eolian city of Mitylene; but the Miletans, who were perhaps not resigned with very good grace to the division of the gain,

did not enter into that syndicate. Grouped around the temple which they had consecrated to their national Apollo of Didymus, they formed a separate society, and as the first occupants, t they must continue to hold the primacy in that motley of active multitude. Their example had been followed by the Samians and Eginetans, these doubles being the last comers. The Samians had as a centre their temple of Hera and the Eginetans their temple od Zeus. There were elements sufficiently diverse; But Miletus and the four other Ionian cities to which was adjoined Samos, this was the civilization of Ionia and its dialect, which dominated in this entirety and gave it tone. We have already had more than one occasion to prove that the cities regarded as Dorian on the southern coast of Asia Minor had scarcely more of Dorian than the name' they had been penetrated by the Ionian genius and had allowed its ascendency. It is Ionian art that is occupied in architecture, sculpture and ceramics, of what remains to us of the art works of Naucratic art. We then have a right to attach to Ionia as an annex oversea this Naucratis, which by the part that it played in the Egypt of the S Saite princes, appears to us as the predecessor, as a first sketch of the Alexandria of the Ptolemies.[1]

Note 1.p.387. The excavations of Naucratis were commenced by Flinders Petrie in 1884-1885 and continued in 1885-1886 by E. H. Gardner. They were resumed first in 1889 for the account of the English School of Athens, and then in 1903 at the cost of the Craven fund of the University of Oxford. For its results, see the third Memoir of the Egypt Exploration Fund. Naucratis. Part I. 1884-1885 by W. F. Petrie with chapters by C. Smith, E. Gardner and B. V. Head. 1886.

Sixth Memoir of Egypt Exploration Fund. Naucratis. part II. by E. A. Gardner, with appendix by F. L. Griffith. 1888.

Annual of British School at Athens. Vol. V. 1888-1889. G. Hogarth. Excavations at Naucratis. Plates II-XIV. Site and buildings. C. C. Edgar. Inscribed and painted pottery. C. C. Edgar. A relief. C. Gutch. The terra cottas.

Jour. Hell. Studies. Vol. XXV.(1905; Hogarth, H. L. Lorimer, C. C. Edgar. Naucratis. Pls. V-VIII. 1903).

By studying the monuments found in these excavations and those from the same source preserved in various museums, Hugo P Prinz has undertaken a general study with the title:- Funde

und Naucratis. Beiträge zur Archaeologie und Kunstgeschichte
[illegible]
[illegible]

A summary of the same kind but much more condensed, [illegible]
given by A. J. Reinach:- Les fouilles de Naucratis et l'Egypte
[illegible]

It was not alone commerce in transit which made the prosper-
ity of Naucratis. A number of artisans were established t[illegible]
who worked both for Greek patrons and for Egyptian. In th[illegible]
[illegible]
those artisans were grouped by trades, as they are today in
the cities of the Arabs, Turks and Persians. We have to con[illegible]
ourselves here with one of those industries, that of the [illegible]
[illegible]
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sible to admit. In the entire extent of the field of ruins,
and especially near two of the temples, in these pits in which
were buried the rejected articles, the frequence of painted
[illegible]
that there was brought from outside into that little city su[illegible]
a prodigious quantity of decorated pottery. Further, for some
of the vases represented by these fragments, the proof is [illegible]
that they were fabricated at the place. There are read de[illegible]
tions in honor of local deities, and these are written in l[illegible]
ters traced with the brush on the clay before firing.[1] It was
[illegible]
factory, that these inscriptions could be placed on the [illegible]
[illegible]
of Naucratis, we know that in the second century of our [illegible]
[illegible]
[illegible]
the city gate opening on the quarter which they inhabit is [illegible]
lled the ceramic gate." [2] The persistence of this industry gi-
ves reason to think that Naucratis had in its vicinity bed[illegible]
excellent plastic clay, and that certain trade conditions w[illegible]
realized in its workshops, where the work was not interrupted
[illegible]

cial kind of cups. He says: "They are in the form of print[illegible]
and appear not to be shaped on the wheel, but by hand; they
have four handles and a broad and flat base; they are cove[illegible]

aus Naucratis. Beiträge zur Archaeologie und Wirthschaftgeschichte des VII und VI Jahrhunderts. (7 th supplement to the Review Clio).

A summary of the same kind but much more condensed, has been given by A. J. Reinach:- Les fouilles de Naucratis et l'histoire de la ceramique grecque (Jour des Savants. 1909,p.354-363.

It was not alone commerce in transit which made the prosperity of Naucratis. A number of artisans were established there, who worked both for Greek patrons and for Egyptian. In the course of the excavations, it was believed to be discerned, that those artisans were grouped by trades, as they are todan in t the cities of the Arabs, Turks and Persians. We have to occupy ourselves here with one of those industries, that of the ceramist. That it was practised at Naucratis during the entire archaic age in shops with a very active production, it is not possible to doubt. In the entire extent of the field of ruins, a and especially near two of the temples, in these pits in which were buried the rejected articles, the fragments of painted v vases were gathered by thousands. It can scarcely be admitted that there was brought from outside into that little city such a prodigious quantity of decorated pottery. Further, for some of the vases represented by these fragments, the proof is made that they were fabricated at the place. There are read dedications in honor of local deities, and these are written in letters traced with the brush on the clay gefore firing.[1] It was not in a workshop in some distant city, purchased at the manufactory, that these inscriptions could be placed on the vases intended to serve as an offering. Finally by Atheneus, who was of Naucratis, we know that in the second century of our era this industry still flourished in his native city. He says;- "There are many potters at Naucratis, and hence it comes that the city gate opening on the quarter which they inhabit is called the ceramic gate." [2] The persistence of this industry gives reason to think that Naucratis had in its vicinity beds of excellent plastic clay, and that certain trade conditions were retained in its workshops, where the work was not interrupted. Atheneus informs us that in his time was made there a very special kind of cups. He says:6 "They are in the form of phiales and appear not to be shaped on the wheel, but by hand; they h have four handles and a broad and flat base; they are covered

by a coating that gives them the appearance of silver.¹ Of these cups described by Athenaeus, one would be tempted to i[illegible] [illegible] Naucratis (Fig. 152). By its small depth, this tends to [illegible] [illegible] of the case. Finally, the white coating that covers all surface there, in its first freshness had something of the tone and gleam of silver.

Note 1. [illegible] refers to dedications to Aphrodite on fragments found in the precinct of Aphrodite.

Note 2.p.388. Athenaeus. XI, 480 E.

The excavations at Naucratis have always been made by English archaeologists. Then it is not surprising that most of the monuments discovered have gone to the British Museum. It is necessary to go to London to study the ceramics of Naucratis and the fragments of the same kind, that have been gathered at other sites in Lower Egypt. Yet other galleries have succeeded in obtaining possession of a certain number of pieces that came from these works. The Louvre, so rich in other respects, is the one of all great museums in which that manufactory is most poorly represented.¹

Note 1. [illegible] sent to the Fitzwilliam museum at Cambridge and the Ashmolean of Oxford, to the museum of Fine Arts of Boston, to the Berlin Antiquarium, to Heidelberg and to Bonn. W. von Bissing [illegible] some fragments for the museum of Munich. The Louvre has only some bits brought in 1908 and 1909 by Seymour de Ricci. Final[illegible] and since their close, the museum of Alexandria has been enriched by the best of the thousands of bits, which seekers for sebakh still extract from the mounds situated between Kom Ga'if and Nebireh, that about a mile east still retains the ancient name.(A. J. Reinach, p. 388).

Most of the vases, whose fragments have been found at Tell el-Nebireh, we believe were made in the workshops of Naucratis, but it does not follow that there have not been introduced into Naucratis many vases from the workshops of the coast of Asia

by a coating that gives them the appearance of silver." Of these cups described by Atheneus, one would be tempted to recognize the protype in a cup of the 7 th century B.C. found at Nauchatis (Fig. 192). By its small depth, this tends to the phiale. It has four handles, and the heads ornamenting these handles, modeled with the roughing tool, imply the free work of the hand. Finally, the white coating that covers all surfaces there, in its first freshness had something of the tone a and gleam of silver.

Note 1.p.388. Naucratis. Part I, p.54. Part II, p.39. This refers to dedications to Aphrodite on fragments found in the precinct of Aphrodite.

Note 2.p.388. Atheneus. XI, 480 E.

The excavations at Naucratis have always been made by English archaeologists. Then it is not surprising that most of the monuments discovered have gone to the British Museum. It is necessary to go to London to study the ceramics of Naucratis and the fragments of the same kind, that have been gathered at other sites in lower Egypt. Yet other galleries have succeeded in obtaining possession of a certain number of pieces that came from those works. The Louvre, so rich in other respects, is the one of all great museums in which that manufactory is most poorly represented.[1]

Note 1.p.390. Small collections of fragments from Naucratis went to the Fitzwilliam museum at Cambridge and the Ashmolean of Oxford, to the museum of FineeArts of Boston, to the Berlin Antiquarium, to Heidelberg and to Bonn. M. von Bissing acquired some fragments for the museum of Munich. The Louvre has only some bits brought in 1905 and 1909 by Seymour de Ricci. Finally, the museam of Cairo levied its share during the excavations, and since their close, the museum of Alexandria has been enriched by the best of the thousands of bits, which seekers for Sebakh still extract from the mounds situated between Kom Gacef and Negrach, that about a mile east still retains the ancient name.(A. J. Reinach, p. 356).

Most of the vases, whose fragments have been found at Tell-el-Nebireh, we believe were made in the workshops of Naucratis; but it does not follow that there have not been introduced into Naucratis many vases from the workshops of the coast of Asia

or from the neighboring islands. We know in what quantities a and with what facility painted vases journeyed by sea from one end to the other of the Mediterranean; but what seems difficult to us, if not impossible, is to distinguish imported vases from those produced by the local industry. If in the form and by t the style of its decoration, a certain vase found at Naucratis strongly resembles a vase that came from a Rhodian or a Samian cemetery, is it not rash to conclude from this, as sometimes done, that this vase received its shape at Rhodes or Samos? [2] More than one master potter of Naucratis might have learned his trade in one of the Ionian cities represented at Naucratis by their sons, that the desire of making their fortune had led to Egypt? Further, in that little Greece of the Egyptian delta, could not one adopt the fashions of the metropolis or rather of the various metropolises, with which were connected the different groups, whose reunion formed this composite and multiple colony? If taste changed in the industrial centres of Ionia, some new procedure in execution was adopted there by the artisans, and some novel motive entered their repertory, they must follow at Naucratis without delay the movement, whose signal had been given in the mother country. Save in one or two cases where the source seems certain, we shall not undertake then to separate imported vases from those of local fabrication. All this pottery of Naucratis, we shall regard by hypothesis as t the work of the potters of the Delta; but it will appear to us in its entirety as a transfer and imitation of Ionian ceramics, an imitation in which is summarized as in a faithful abridgement, all the scattered and varied efforts of European Greece.

Note 2.p.390. Hugo Prinz in his Memoir, that further shows such a careful and systematic study of the fragments from Naucratis, starts with a hypothesis in contradiction with that a adopted by us. He regards as imported nearly all vases whose fragments have been collected at Tell.el-Nebireh (p. 38, 42, etc.). He divides them into vases of Miletan, Samian, Clazomenian, Lesbian, Cyrenean, Melian origins, etc. The great defect of this classification is the small number and the slightness of the indications observed to define what Prinz terms these different ceramics. I scarcely see that characteristics of the Cyrenaean are sufficiently established, that one can at Naucratis take from a heap certain fragments, and affirm with some

assurance that they came from vases made at Cyrene.

Like all ceramisc that the tomb has guarded, that of Naucratis is reduced to bits, and it has not been possible to restore nearly complete but a very small number of vases. But the fragments are frequently of dimensions sufficiently large to allow the form to be divined, to which they belonged, and in any case to appreciate the style of the decoration. However irritating it may be to hardly have there more than bits to study, still by this means men have come to classify the vases from Naucratis, and to divide them into groups distinguished by differences of manufacture corresponding to the differences in date.

The group that seems most ancient comprises vases of various shapes, jars, hydrias, amphoras and crateras; dishes and cups, characterized by the use of a whitish glaze of slight resistance, frequently detached in scales. This glazing had been applied to the entire exterior of the vase, whose interior was painted black. The ornamental designs are executed in brown sometimes tending to red, enhanced by touches of purple and sometimes of white. The decoration has as a principle the division into concentric or superposed bands, occupied by files of animals, real or factitious. Lions and wild boars, ibexes and goats, hinds and stags, griffins and sphynxes. With these processions of animals sometimes alternate garlands of the buds and flowers of the lotus. The ordinary elements of these entirely conventional decorations reappear in nearly the same order on many fragments; but of all these, we shall indicate but one, for the variety of the motives that ornament one side. What the painter has placed on the cratera over the lion and stag of the lower zone are two cocks facing each other, separated by a serpent with double coils, raised and menacing head.(Fig. 193). On another side of the cratera is an eagle between two riders, over a hind and a siren (Fig. 194). As an oddity may be cited a vase in form of an ascos, on the body of which are represented dogs pursuing a hare with two passing wild goats.[1] The decoration has suffered too much to be suited for reproduction. The goat with the beautiful curve of his horns downward to the rear, furnishes the painter with one of his favorite motives. This painter also loves the fallow deer with the white spots dotting its covering. There spots are either given by

by reserves, that allow the ground coating to appear, or by t touches of white laid on the black. Most of the figures are in opaque outline; but sometimes the head and the extremeties of the members present only a line drawing, which gives more effect to those parts of the body.[1] Lines are never incised. The human figure very rarely appears on this pottery with white g glaze on which there is no engraving. On those at least numerous fragments that we have given, their is only represented b but one head of a man of very rude execution and the bottom of a draped figure.

Note 1.p.392. Naucratis. II, Pl. V, 1.

Note 1.p.393. The same. II, Pl. XII.

Note 2.p.393. The same. II, Pl. V, 5, 6.

This human figure on the contrary is very frequently found on the fragments of vases, that are certainly a little less ancient. They came from a pottery, without breaking with the traditions of the first fabrication, that has suffered the influence of Corinthian manufacture. To the products of the latter was opened the way to European Greece, and there without renouncing the use of the white coating, they had borrowed from the Corinthian artisan to model the interior of the image the convenient process of incised lines. As a specimen of the mixed style that characterizes this borrowing may be mentioned t the heads and bodies of negroes presented by several fragments (Fig. 195). On considering these images, it seems that the artist took m.licious pleasure in exaggerating the deformity of these types offered to the eyes in the servile population of Egypt. The complacency with which he reproduced them is another indication to allege in favor of the hypothesis, which is ours, that of a local industry which gave birth at least to most of the vases, whose fragments strew the soil of Naucratis. To this same series are also connected several other paintings. On a fragment of a cratera is seen an amazon that gallops behind a great swan.[1] Elsewhere these are Kosroi, files of males or female dancers.[2]

Note 1.p.394. Naucratis. I. Pl. VI, 1.

Note 2.p.394. The same. II, Pl. XI, 1, 2; XIII, 1.

A type peculiar to Naucratis by its form of decoration is t that of a great bowl with or without feet, whose contour presents a broken line (Fig. 196). Its interior is coated by a black

and brilliant glaze, on which appear parallel bands of red, p purple or white. On the exterior is a glaze of yellowish brown. These two coatings were fixed on the clay by firing; they do not scale like the white covering. On that of the exterior is applied in black a decoration composed of the same elements as those of the vases of the first series, real animals or imaginary monsters, horsemen pursuing deer,[1] general ornaments like the fret, ornaments borrowed from the plant kingdom, the palmatium and especially the bud and flower of the lotus. The design of these palmatiums and these garlands is often very free, and one notes the same boldness of line in the lions' heads.[2] (Fig. 197). There are also sometimes floral motives painted in red and white on the black glaze covering the interiors of these vases.[3] By this medley of colors and the character of these motives, these vases recalled to one that exhumed them the appearance of the prehistoric Cretan vases called of Kamerais.

Note 1.p.395. Naucratis. II, Pl. VI, 3; VII; XIII, 2,8. Annual of British School at Athens. Vol. V. Pl. VI, 9.(Fragment of a great lebes).

Note 2.p.395. Jour. Hell. Studies. 1887. Pl. 79, 3.

Note 3.p.395. C. C. Edgar in Annual. Vol. V, p. 57-58. Jour. Hell. Studies. 1905. p. 121.

Note 4.p.395. Jour.Hell.Studies. p. 119-121. Pl. 79.

On these vases, bowls and crateras, the polychrome decoration aims at effect by the variety of its tones and by their animation. Thus on one fragment are four different colors. The ground is a creamy yellow on which the figures, a spotted deer between two lions, is detached in full outlines, whose mass is given in black; but on this black are laid touches of purple and of white. The modeling is completed by incised lines. In the field are black and white rosettes, small black flowers with four petals. These images are enclosed between a row of clubs and a fret (Fig. 197).[5] On another fragment of the same pottery, where the ground is the same yellow, the brush has drawn in white, red and black a sphynx, whose head is nornamented by a reversed Mycenaean plume.[6] Elsewhere the ground is d dark red and is divided in metopes by vertcal black and white stripes. In each of these panels, executed in light yellow, is a nude figure of a horseman armed with a spear. Brown lines m

model the form.[7] Still elsewhere on a ground of brick red arise busts of bearded persons; they are black and red with white t touches.[1]

Note 5.p.395. Jour. Hell. Studies. 1887. Pl. 79, 2.

Note 6. p. 395. The same. 1905. Pl. V, 1.

Note 7.p.395. The same. Pl. V,2.

Note 1.p.396. E. A. Gardner. J. H. S. 1887. p.119-120.

Of this pottery frankly polychrome, we have already found r remains at Daphnae (Fig. 191); but Naucratis has furnished much more numerous specimens of it. Without good reasons, it has already been desired to attribute it to Clazomene; but for the archaeologist that has handled most of the fragments from Naucratis, it is not doubtful that it was made at Naucratis itself.[2] It is gathered there in considerable quantity, a and this type of bowl has not been found on any other field of excavations. What seems to solve the question is that on several of these fragments, that came from the precinct of Aphrodite, are read dedications with letters painted on the clay before placing it in the kiln. Finally, what confirms this hypothesis is that on some of these fragments are noticed motiveu, which seem to have been suggested by the decorator by this Egypt that he inhabited. Such is the fragment that shows a profile of a man on which rises above the brow the head of a serpent. The painter is there certainly inspired by the traditional headdress of the Egyptian kings, and he has carried fidelity in the imitation so far as not to forget those scarf ends tied around the head, that in the royal images fall on the nape and float behind between the shoulders.[3] Some of these b bowls had as sole ornament two great eyes painted on a cover of beautiful yellow, between which the nose is sometimes indicated in an entirely schematic manner. This is still a motive that appears to have been borrowed from Egypt. One has good reason to believe that popular superstition attributes to it the value of a sort of talisman.

Note 3.p.396. Histoire de l'Art. Vol. I, Figs. 474, 502.

Note 2.p.396. In the interior of one of these great bowls, E. Gardner read, traced in great white letters this inscription :- (Greek). The vase had been ordered from the manufactory to be offered to Aphrodite.

If the secondary varieties are neglected, all pottery found

at Naucratis divides into two groups, that are distinguished from each other by sufficiently clear characteristics. On the one hand, there are vases without the human figure, that admit no elements of other than images of animals arrayed in pairs, or that march in long processions. No incished lines. The brush has done all this decoration. . The painter has only a v very poor repertory; however, by the skill with which he used these motives, especially by the harmony that he knows how to produce, with a very just sense of color, between the softness of its creamy grounds and the diluted blacks, the purple and the white of his figures, he gives to the whole a harmonious appearance, that does not fail to please the eyes. In the second group, where the decoraor calls the point to the aid of his brush, the themes are much more varied and the colors more vivid; but the polychromy is not an example of any violence.

It is not doubtful that the first group, with the simplicity of its entirely conventional decoration and its discreet colorings, may be the most ancient. In the second is felt the effort of a school that desires to renew itself at any cost, sometimes free to exceed moderation. Thus one risks little fo deceiving himself by admitting that the vases of the first group in general came from Miletan Naucratis contemporaneous with Psammeticus I, while those of the second group had been made in the more populous and richer Naucratis, in which the privileges granted by Amasis had attracted Eolians and Ionians, Dorians and Eginetans. The most ancient of these vases dated back to the 7 th century, to a time when oriental Greece was not yet accustomed to seek and import the products of the workshops of Corinth. It would date from the second half of the 6th and perhaps from the first years of the 5 th centuries. Herodotus attests that the prosperity of Naucratis survived the Persian conquest.

The local industry thus by striving in invention and by sometimes inspiring itself by foreign models, might prolong its activity quite late; but the colony had already commenced much before that time to obtain from outside many painted vases. It is sometimes difficult to distinguish from those made at Naucratis itself, those supplied to it from Miletus, Rhodes and t the other industrial cities of Asian Greece and of the adjacent islands; but one does not feel the same embarrassment in deter-

determining the imports from European Greece. At Naucratis are very rarely found remains of the vases termed protocorinthian; but those of the true Corinthian ceramics are found there in much greater number.[1] Perhaps the Eginetan merchants brought them to this market. Attic pottery is well represented there. Doubtless by the intermediary of the Eginetans, it seems to have found at Naucratis from the middle of the 6 th century more favor and sace than the ceramics of Corinth. There have been collected many fragments of Attic vases with black figures contemporaneous with the great cratera signed by Clitos and Ergotimos. The associated signatures of this painter and this potter are found at Naucratis on two fragments of cups. An Athenian ceramist previously unknown, Sandros, has left his name on four other cups at Naucratis. It has given the 75 th signed work of the fertile Nicosthenes.[2] No Attic vases with red figures. The beginning of this style corresponds to the time when the median wars interrupted the commercial relations between European Greece and Egypt, that had become a province of Persian empire. Finally, here is a last current of importation that should not be forgotten. Soce 30 fragments whose color and decoration recall the cup of Arcesilas are regarded as of Cyrenaean origin, because of this similarity. Their presence is explained by the relations that had always existed between the ports of Cyreyica and those of the Delta, relations which became still closer when Amasis was allied by marriage with the royal family of Cyrene.[1]

Note 1.p.398. Hugo Prinz. p. 68-75

Note 2.p.398. A. J. Reinach. (Jour. de Savants. 1909,p.360). Hugo Prinz. p. 75-81.

Note 1.p.399. Naucratis. I. p.53-54; II, p.43-44; Hugo Prinz. p. 64-67.

By its luxurious pottery, Naucratis interests us here; but to collect the fragments of that ceramics and to define it, o one is led to survey the discoveries of all kinds that have been made on several occasions at Tell-el-Nebireh. Now this study of the whole cannot fail to suggest to the historian reflections, that aid him in seizing one of the original traits of Greek genius.

Naucratis was a Greek province in Egyptian territory, like Hongkong in our days on the shore of the bay of Canton, an

English province in Chinese waters. Assuming that in some 10 centuries the city of Victoria, capital of the colony is reduced by some catastrophe to a mass of ruins similar to that beath which are concealed the remains of what was Naucratis. Suppose that a Flinders Petrie of that time undertakes excavations in that heap of rubbish intended to permit him to form an idea of the life led about the year 1900 of our era in that city of European colonists, who thus established themselves on the margin of the civilization of the middle empire. In the trenches that he will dig just where rose formerly the beautiful houses of wealthy English shipowners and merchants, he would collect the remains of machines and furniture, vases of metal and of clay, objects of all sorts to which he would have a right to attribute to an English origin according to their fabrication; but he would certainly gather, mixed with those products of w western industry, fragments of lacquer, bronzes anf Chinese or Japanese enamels, Satsuma porcelain broken into a thousand pieces. Perhaps he would even recover the traces of workshops, where in the immediate vicinity of the European quarter native workmen practised the trades learned from their ancestors. Thus he would convince himself that those strangers that came so far to live in a world very different from the one in which they were born, had retained their hereditary habits and their form of mind, but they had been very sensitive to the prestige of the arts of the Orient, and that in the installation and decoration of their residences, they gave their concession, as it is called, artisans of the yellow race occupied in fabricating for them in place all that they borrowed from China in tools, goods and luxury.

At Naucratis is nothing similar. There seems to have existed at the south of the temple of Aphrodite an Egyptian town, perhaps preceding the foundation of the Greek Naucratis, which w would then have served as a residence for the royal officials charged to oversee and protect the foreign colony.[1] There were exhumen the remains of the material and works of a manufactory of scarabs of glazed clay and of figunines made of the same p paste. The cartouches impressed on these scarabs are so incorrect, that it seems difficult to recognize in them the hands of true Egyptian artists. Scarabs and figurines were of those exported wares for which men were satisfied by something nearly

correct. Did Greeks carry on this workshop, whose products
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to suppose this; but it was observed that scarcely any vestige
of the presence and activity of Greeks was found in this field
of the excavations. There were scarcely found those bits of p
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cart loads. It was then asked if there had not been rather a
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is known that the Phoenicians made a trade of counterfeiting,
those potted in the suburbs of Naucratis, must find their pro-
ount in exporting their wares by the intermediary of the n
ands of Miletus and of Egina.

Note 1.p.100. Hogarth in Jour. Hell. Studies. 1905.p.109.

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situated north of the Hellenion, where were huddled close
together the public and private buildings of the different
Greek agencies. Everywhere there was not uncovered a single
effigy of a god or of an Egyptian king, not an object bearing
the mark of the old industries of the valley of the Nile, th
recalled the beliefs and usages of the great country in which
Naucratis held so small a place. All at Naucratis is Greek,
and purely Greek. Scarcely are there some motives of decorati-
on like the prophylactic eye, the brow of a man surmounted by
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the concession, and glanced at the surrounding country and o-
ties. One could just as well believe himself in some island
of the Aegean always inhabited by Greeks, as in one of the
cantons of the Egyptian Delta.

This is not because the Greeks settled or were ignorant of
their Egypt, whose wealth they had come to exploit. They were
too intelligent and too inquisitive to hold this disdain or t
condemn themselves for this ignorance. They admired rather na-
ively sometimes this ancient civilization before which they
felt themselves very youthful. They were engaged in borrowing
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this usage and these borrowings, they felt themselves profo-
undly different from the external world. Everything separated
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correct. Did Greeks carry on this workshop, whose products are thought to be found at Rhodes and even elsewhere? Men had begun to suppose this; but it was observed that scarcely any vestige of the presence and activity of Greeks was found in this field of the excavations. There were scarcely found those bits of p painted pottery, that in the north quarter were gathered in cart loads. It was then asked if there had not been rather a Phoenician workshop, opened before even the coming of the first Greek colonists, and that was closed after their arrival. It is known that the Phoenicians made a trade of counterfeiting. Those posted in the suburbs of Naucratis, must find their account in exporting their wares by the intermediary of the mercants of Miletus and of Egina.

Note 1.p.400. Hogarth in Jour. Hell. Studies. 1905.p.106-8.

Excavations gave entirely different results in the ground situated north of the Aphrodision, where were huddled close together the public and private buildings of the different Greek agencies. Everywhere there was not uncovered a single effigy of a god or of an Egyptian king, not an object bearing the mark of the old industries of the valley of the Nile, that recalles the beliefs and usages of the great country in which Naucratis held so small a place. All at Naucratis is Greek, and purely Greek. Scarcely are there some motives of decoration like the prophylactic eye, the brow of a man surmounted by the uraeus, some heads of negroes, that give reason to think that the ceramists of Naucratis sometimes passed the limits of the concession, and glanced at the surrounding country and cities. One could just as well believe himself in some island of the Egean sea always inhabited by Greeks, as in one of the cantons of the Egyptian Delta.

This is not because the Greeks scorned or were ignorant of that Egypt, whose wealth they had come to exploit. They were too intelligent and too inquisitive to hold this disdain or to condemn themselves for this ignorance. They admired rather naively sometimes this ancient civilization before which they felt themselves very youthful. They were engaged in borrowing many technical procedures which they lacked; but in spite of this homage and those borrowings, they felt themselves profoundly different fsom the oriental world. Everything separated t them from it, their conception of the universs and of life,

their religion and poetry, gymnastic training, republican manners and panhellenic patriotism. They had such a vivid feeling of the contrast, that where they found themselves plunged and as if drowned in what they termed barbarism, they retired within themselveswith an instinctive movement, and applied themselves to rebuild a little Greece, the image of the great one, in some distant region to which they had been led by the love of adventure and luxury. Everywhere that they had settled, the G Greek city was reconstituted at once with its debates in the agora and with its elective magistrates, its palestra and gymnastic games, with its competitions in music and poetry. The organism thus created was as if impenetrable to external influences. For those who succeeded in modifyiyd it were required much time, and events that no one was able to foresee in the 6 th century. It was necessary for the Macedonian conquest and the monarchies born from it to move and stir the human material from the coasts of the Egean sea to those of India, that all peoples should be mingled to the point of losing something of their moral independence and of their originality.

It has been said that Naucratis was like a sketch, a first edition of Ptolemaic Alexandria. The comparison is true so far as regards its position on the map, the establishment of the Greeks at a fixed post in Egypt and the commerce which was carried on there; but it is faulty in other respects. Naucratis was a closed Alexandria, where the two Greek elements did not react on each other as they did in the great cosmopolitan city, where all histories of the past were resumed and brought together, where operated the fusion of all beliefs and of all myths, all doctrines and all the arts of the old world. Al Alexandria this ancient world was studied in a microcosm, that was its faithful and living summary. At Naucratis was found only a projection of greece, a Greek city, or rather a group of little associated Greek cities, each of which gave its personal note in the concert, brought to it the peculiarity of its own traditions, of its industry and of its art.

3. What has been recovered of Ionian ceramics on the coast of Asia Minor and in the adjacent Islands, excepting Rhodes.

It would have been expected that there must be counted among the centres of Ionian art the island of Cyprus, which is nearer

Ionia than the coasts of European Greece. But like its sculpture, Cyprus by its native ceramics, that for several centuries appears to have responded to its needs and tastes.[1] The island has furnished very few vases in which one has reason to recognize objects imported from outside, and those are rether of A Attil origin. There have also been found some Corinthian aryballas. As for the Ionian industry, in the contributions of the Cypriote cemeteries it is only represented by an amphora, whose fabrication is that of the vases of Rhodes.[2]

Note 1.p.402. Histoire de l'Art. Vol. III. Chap. X. Sect.2.

Note 2.p.402. P. Hermann. Das Grabenfeld von Marion auf Cypern. 1888. p. 13. Note 10.

On the other hand, this island of Rhodes is nearer the metropolises of Ionism, and has reserved happy surprises for us. W When the great movement of peoples followed what the ancients called the return of the Heraclides, immigrants from Argos were established there. Then the Dorian blood predominated there;[3] but in all that region of the European coasts of the Egean sea, Ionian genius had invented so much that its prestige and its ascendancy was imposed on the cities themselves, whose inhabitants were not of Ionian race.

Note 3.p.402. The Rhodians "eioi genos;" Thucydides.VII.57.

To speak here only of plastics, all that has been collected of archaic sculpture in Asia Minor and in the islands adjacent, allows to be recognized the types created by Ionian art and t the mark of its style.[4] It is thus for the stone statuettes collected at Camiros;[1] Some entirely similar came from Samos, Clazomenes and Massilia, a colony of Phocea.[2] We have represented a relief discovered in the little island of Syme near Rhodes;[3] now by its entire form as by the fabrication of the image, this stele announces itself as the work of an Ionian a artist.

Note 4.p.402. Histoire de l'Art. Vol. VIII, p. 329 and Note 2, Fig. 142.

Note 1.p.403. The same. Figs. 138, 140, 144.

Note 2.p.403. The same. Figs. 119, 139, 193, 194.

Note 3.p.403. The same. Vol. III, Fig. 143.

If by the representations of the human form given there, Rhodes appears to us as a dependeucy of Ionia, ought we not to expect this predominance of the arts of Ionia to present themselves

more strongly still in what the excavations restore to us of its ceramics? The products of the industrial arts are more mobile than those of statuary, and the workmen that fabricate it easily travel; they soon open a workshop where they find a sale for their goods. Whether the people of Rhodes obtained their pottery from miletus and Samos, or they purchased it from potters who had fixed their residence in that island, the cemeteries of Camiros have given us the best series of Ionian vases now possessed, the series which counts more well preserved vases, and from which one can demand the most certain elements of comparison, when he undertakes to refer to Ionian manufacture fragments or vases that have been collected in various places, frequently very far from the country of their origin. By their importance, by finds made at Rhodes they call for a special and separate study here.

The original characteristics of Ionian ceramics, their traits are found more or less marked in the very rare vases or fragments of vases, that were found very far apart either in Iona properly so called, or in the territories adjoining Inoia in which were formerly established Eolian and Dorian immigrants.

The importance of the industry and commerce of Miletus have caused some archaeologists to think that Miletus must have had potters that produced much, and who exported in full cargos their painted vases into Egypt and into the islands. The conjecture is specious; but it is truly to abuse it and term Miletan on the faith of this hypothesis, vases with white coating and files of animals that are found either at Naucratis or at Rhodes.[4] It is possible that the workshops of Miletus may have fashioned vases of this sort, and fragments of them have been gathered on the site of Miletus, where recent excavations have exceptionally reached the archaic layer; but the fragments of vases of this kind are mixed with bits representing other varieties of Ionian ceramics. This results from a single very brief statement, which we have given concerning those finds.[4] Until a new order, nothing then authorizes us to affirm that the Miletans were the creators of the style to which it is desired to attach their name, nor that they have at any time whatever the monopoly of the fabrication of the vases in question. The term miletan vases that it is proposed to introduce in ceramographic nomenclature thus appears to us for the moment,

unjustifiable neither by a historical text nor by the results of excavations.

Note 4.p.403. I believe that Böhlau was the first to place that ticket on a number of vases and of fragments, none of which were found at Miletus itself nor in the vicinity of that city. His example has been followed by Hugo Prinz.

Note 1.p.404. See the fourth brief report of Wiegand on the excavations that the royal museums of Berlin caused to be made at Miletus.(Sitz.of Acad. of Berlin.190ᵥ. p.545-548.

In Ionian lands, at only one point in the island of Samos, at the gates of the ancient capital, the pick has attacked a cemetery of the 6 th century. There have been opened tombs contemporaneous with Polycrates. The results of those excavations have been stated with much precision; but they have only produced vases in small number and of very limited dimensions.[2]

Note 2.p.204. Böhlau. Aus ionischen und italischen Necropolen. 1898.

When in regard to vases of Italian fabrication is proposed the question of origin, one of the first names that come to t the mind is that of Clazomenes; the sarcophaguses found there suffice to prove the mastery with which were practised the arts of clay. The kilns from which came those enormous pieces m must also have furnished vases of all kinds; but the mode of burial that the Clazomenians had adopted excluded the tombs w which elsewhere preserved for us the painted vases. We have f from this site only snme fragments gathered on the surface of the ground.[3] The most singular are two fragments of a hydria on which it has been desired to recoknize the image of two episodes of the Trojan cycle, Hecuba .nd Priam before whom stands a herald, and who see running toward them Troilos pursued by Achilles, then on the other part is Achilles dragging the corpse of Hector around the tumulus of Patroclus (Fig. 198, 199). By their appearance these paintings recall several vases of Daphnae and of Naucratis. Details are wanting concerning fragments of "vases of the ancient style," that were collected at Smyrna and are now in the museum in Leyden.[1]

Note 3.p.404. R. Zahn. Vasenscherben aus Klazomai.(Athen - Mitt. 1898. p. 38-79; 2 Figs. in text and Pl. VI).

Note 1.p.405. O. Jahn. On p. 27 of the introduction of his Beschreibung of the vases at Munich.

Phocea is again one of the cities of which one cannot fail to think in the same connection. There is known the part taken by it in the maritime commerce of Ionia, what relations its m merchants had created for themselves on the coasts of Italy a and even on those of Spain. If many vases contained in Tuscan tombs came from Ionia, there is every reason to think that the Phoceans were among the most active importers of that ware, a and that they produced at least a part of those vessels of luxury, which they loaded on their shops; but up to the present, the ceramics of Phocea remains more unknown to us than even that of Clazomenes. But a single vase is cited, that was discovered at Phocea, it is assured;[1] but that this is a false indication of the source, or that the piece in question had been brought afar in antiquity itself, where it is said to have been found, the quality of the clay, the pale tones of the painting and the choice of motive concur in causing to be recognized in it rather the work of some Cypriote potter.[2]

Note 1.p.406. Ramsay in Jour. Hell. Studies. Vol. II, p. 303-305. Ramsay speaks there of another vase from the same source, which he bought at the same time and proposes to publish later; so far as I know, he has never kept that promise.

Note 2.p.406. Collignon. La tete d'Hathor sur des vases Cypriotes.i(Rev. d. Etud. Grecques. 1899. p.33-39). C. Smith, who owns the vase in the British Museum, is of the same opinion.; he placed it there in the glass case that contains Cypriote pottery.

The great cities that would seem to have furnished the richest booty, have also given almost nothing of this sort, Ephesus no more than Miletus. On those two sites the archaic layer is at a great depth beneath the alluvium of the Cayster and the Meander. On both of those fields, recent excavations have scarcely more than uncovered the ports, walls, streets and edifices of the cities of the Macedonian and Roman ages. Further, one cannot affirm from the preceding that in this industry of ceramics, those metropolises of Ionia necessarily enjoyed the first role. When the history of the industrial arts in other civilizations is studied, it is proved that the most fruitful and most celebrated workshops were not always established in the great centres. There are often local circumstances, which decided the site on which was born and developed a certain indus-

industry. Men wished to have in hand at the foot of the work the primary material that they worked. potters preferably built their kilns where the soil supplied the best clay. Thus among us the first manufactories of porcelain were founded at Limoges in the vicinity of the beds of kaolin. To speak of Greece alone, do we not see a very small city like Tanagra become for a century or two one of the principal seats of the industry of the terra cotta figurines, and to acquire in this sufficient vogue, that the types created by it were copied even in Asia Minor.[1] Thus what would seem to result from the inquiry is, that it would be useless to seek in Ionia a city that played in the industry of ceramics a role analagous to that successively filled in Europe, first by Corinth and then by Athens a century later. We have no reason to suppose that any Ionian city, either continental or insular knew how to ensure itself for a longer or shorter time in a monopoly of that kind, by t the activity of its workshops and by the superiority of its products. In that Ionian world where was everywhere movement and life, in which was scarcely not one city and even of the second order, which did not glorify itself as having given birth to some poet, sage or famous artist, workshops must have been numerous. Each of them must have had its independence and its originality; this is what is thought from the observations made in comparing the pottery of Naucratis and of Daphnae, or at Rhodes the socalled vases of Fikelloura with those that at first were termed vases of the Asian or oriental style.

Note 1.p.407. E. Pottier. Les statuettes de terre cuite dans l'antiquite. 1890. p. 157-158.

North of the Hermos and south of the Meander, among all those Greeks termed Eolians and Dorians, that borrowed from the Ionians ideas and the firms used to express them, almost no painted vases are found except at Rhodes, that present any interest. The Eolian city of Kyme near Smyrna has supplied two fragments of a great vase which seems to have been a cretera.[2] On one of them are horsemen and on the other are satyrs, that dance around one of those crateras (Fig. 200). The painting is with black figures on a red ground. The theme and processes of execution all recall the group of those vases found in Etruria, known by the name of Hydrias of Caere; it is now agreed to attribute to these hydrias an Ionian origin.

Note 2.p.407. F. Dümmler. Vasenscherben aus Kyme in Aeolis. (Arch. Inst. Röm. Abth. 1888. p. 1\0-168 a, Pl. VI).

A little farther north at Pitave on the Elaitic gulf have been made excavations for the Ottoman museum, to which we owe the power to publish a beautiful Mycenaean vase, one of those on which the marine decoration is most singular and most complicated.[1] In the graves in which for a thousand years the inhabitants of this little city have deposited their dead, to the Myceneaan pottery has succeeded vases in which painting an a brown that firing has often changed to pale red, is applied on a white glaze. To the list of Rhodian oenochoes must belong a fragment of a greatvase on which is seen a passing stag between a fylfot cross and a fret.[2] (Fig. 201). There is a specimen of the same style in a cup with a foot, decorated both inside and outside (Fig. 202). On one side is a crouching animal without a head, but which seems to be a dog. On the field are rosettes, circles and lozenges containing large dots. Here again is a plate of a type represented at Camiros by numerous examples; but the decoration is simplified here as much as possible (Fig. 203).[1] Nothing but a star at the middle, then several concentric circles, and finally a border divided into a number of little squares, in each of which is a geometric design.[2] In another interment was found a little Corinthian aryballa.[3]

Note 1.p.408. Histoire de l'Art. Vol.VI,p.923-924;Figs.489,491.

Note 2.p.408. Revue Arch. 1883[2],p.122.

Note 1.p.409. There has been discovered at Myrina a nearly similar piece(La necropole.Vol.I, p.233, Fig. 36).

Note 2.p.409. The same. p.505; Fig. 57.

Note 3.p.409. E. Pottier and S. Reinach. La necropole de Myrina. 2 vols. of text and plates. 1887.

In the same district is found Myrina, another of those obscure and prosperous cities, that may be said to have left no t trace in history. Yet today there is perhaps no amateur in art, who does not know the name of Myrina, for all the pretty figurines of terra cotta that have passed from its cemetery, By t the excavations made there by M.M.Pottier and Reinach, into t the glass cases of our museum of the Louvre; but all men of taste as were the Myrineans, they do not seem to have ever had a passion for ceramics of luxury, such as they had in the third

century B. C. for those light and charming works of the modeler in clay. The archaic tombs there furnished but very feu painted vases, besides a monochrome pottery that has always been a current fabrication. The production of Ionian workshops is scarcely represented there except by an amphora of heavn form, on which the decoration was executed on a coating of yellowish white in a brown tone, that a touch of fire has changed into red.(Fig. 204 bis). On the entire bottom of the vase is no other ornament than a circular band, then at the top of the b body is a fret between two bands, and on the shoulder above is at one side a reserved lotus flower between two wide lanceolate leaves, on the other being "a bust of a man with the head turned toward the right with long painted and recurved beard, no moustaches, an enormous front eye, long hair falling on the shoulders. He is clothed in a tunic with short sleeves and raises both hands as if in a posture of prayer. At his right is a large rosette and all around the field are fylfots. The whole is enclosed by a band of vertical frets.[1] On the other sides are the same frets."

Note 1.p.411. La necropole de Myrina. Vol.I,p.585-586.

The decoration is simpler on another amphora of the same t type and style, that came from the same cemetery. Here also t the field is void on all the lower part of the vase. The painter has given ornamentation only of the zone of the shoulder. He has placed on one side a reversed lotus flower, and on the other is a great rosette among ornaments in the form of volutes and in an enclosure of frets. Around the neck and at the top of the body is a motive, that recalls the meshes of a fillet.

Not alone in Eolian districts touching Ionia have appeared the remains of a pottery on which are recognized several motives familiar to Rhodian ceramics. These motives are all represented in the fragments which Schliemann and Dörpfeld gateredd in the course of their excavations at Troy.[1] There is noted a fragment of the same kind found at Alexander Troas in the coast.[2] Also in the Troad at the site of Larissa have been found the remains of a plate with edges decorated by images of passing stags and ibexes, quite similar to those of Rhodian oenocheos. (Fig. 205). Some white glaze; some geometric ornaments around those figures.[3]

Note 1.p.412. Dörpfeld. Troja und Ilion. 1902.p. 310.

Note 2.p.412. G. Hisschfeld. Annali. 1872. p.175.

Note 3.p.412. Böhtau. Aus ionischen und italischen Nekropolen. p. 86-88.

Traces of this Rhodian pottery have also been found in another region south of Ionia, on the coast colonized by the Dorians and opposite Rhodes. In 1903 the British Museum acquired "two fragments of archaic Rhodian plates, on which are represented ships. They came from Datcha near Cnidos."(Fig. 206).[1]

Note 1.p.413. C. Torr. Rev. arch. 1894[2] p.27.

4. Rhodian Pottery.

We have undertaken to draw up the inventory of the products of Ionian ceramics, that have been collected in either continental Ionia, in the dajacent islands that were its extension, among those Eolians and Dorians on the coast of Asia, that so docilely submitted to the ascendency of Ionian genius, or finally in those colonies of Egypt that were like distant annexes to Ionia; but whatever care was employed to omit no place that offers interest, with some rare exceptions we have scarcely b been able to mention more than fragments, of which many were even too small for it to be easy to divine the form of the vase from which they came. We had to deal with those bits picked up in the dust made of the ruins of destroyed cities. On the contrary at Rhodes is the tomb, the faithful guardian of the treasures deposited in it, and which has preserved the painted vasees. This is not to find those often intact, such as they were enclosed on the day of the obsequies. Nearly all are broken in the graves by the pressure of the earth of the walls a and by the fall of stones detached from the ceiling; but the fragments have remained in place in a heap. Sometimes these have been so greatly crushed and reduced into bits by a violent shock, that it is impossible to utilize them, but also frequently the restorer has little difficulty to fit together these fragments and to restore the vases almost entirely.

The Mycenaean vases that have been found in this island, especially at Ialgos, give reason to think that during the so-c called period of primitive Greece, that this island was inhabited by tribes related to those, whose industry and arts are represented by the monuments discovered at Cnossos and Phaestos, Mycenae and Tiryns, there must have been one or more Achaian principalities.[1] These Achaians had found the Phoenicians

established on some points of the island, to whom it was convenient to enter a port when they sailed north in coasting along the south shore of Asia Minor. In certain cults of the island has been the persistent trace of the contact produced then between Syrian merchants and the ancestors of the Hellenes. After the European Greeks had been invaded by the Dorians and when these found themselves crowded in the Peloponessus and began to emigrate to the islands and the eastern shores of the Egean sea, the island fell into the power of colonists sent by Dorian Argos; but there as elsewhere, the ancient inhabitants doubtless continued to form the bulk of the population. Heirs of t the Phoenicians, they could transmit to the newcomers the traditions of the trade and of taste deposited with them. By this too brief summary of a history whose details escape us, it is seen what survivals and what influences must mark the art, that expanded in surroundings so prepared, when at the signal given by Miletus and Ephesus, the genius of the Asian Greeks took i its flight and produced that brilliant flowering, of which unfortunately nearly all is cost, in the domain of plastics as in that of thought and of poetry.

Note 1.p.414. One of these Achaian chiefs,was Tleptolemus in the Iliad, who furnished 9 ships to the Greek fleet (II, 653-670). He led to the combat the contingents of three citiesof the island.

From a very high antiquity, three cities already named by H Homer, divided the country of the island.[2] These were Ialysos at the north, Lindos on the eastern coast and Camiros on the western shore. It wasy only in 408 that they withdrew and abdicated for the benefit of the great and illustrious city which they had concurred in founding, and that took the same name as the island.[3] Of those old cities, Camiros seems to have been the most important and most populous. From its cemetery, excavated by Salzmann and by Billoti, came most of the vases that represent in our museums Rhodian ceramics. In the suburbs of Camiros have been recognized several groups of tombs, designated by the names now given to each of the cantons in which these discoveries had been made. There is the cemetery of Fikelloura, that of Siana and still others. It has been proposed to apply to certain kinds of vases the name of the cemetery in w which they have at first been found in numbers; but the series

[illegible]
[illegible]
[illegible]
[illegible] could not then be fixed on but [illegible]. They [illegible]
[illegible] in a certain cemetery rather than another. If these [illegible]
es the one all appear to have come from the same [illegible]
[illegible]
be noted, so that only according to the fabrication and th[illegible]
style of decoration must be established the distinctions [illegible]
the classification be attempted.
[illegible]
Note 3. p.414. Diodorus. XIII, 75. Strabo. XIV, 2-6, 9,1 .
In following this method, a classification was imposed [illegible]
[illegible]
distinguished in two series, to each of which was attrib[illegible]
foreign origin. At Rhodes as at Naucratis, [illegible]
[illegible]
local fabrication and it is of the most elementary [illegible]
that some have risked giving it the name of vases, which [illegible]
been collected on the sites of cities sufficiently importa[illegible]
and prosperous to make for themselves the pottery that they
needed. In what concerns Samos, we are not obliged to [illegible]
notance so complete as for Miletus. [illegible] much common pottery
[illegible]
there should be enough pottery to form some idea of what the
archaic Samian pottery was; but in what is divided of it by t[illegible]
the specimens alone, there is nothing that gives the impress[illegible]
of a very active manufacture, or an autonomous fabrication,
whose products had a certain originality. These are found [illegible]
secondary groups of types already known to us by Delphes [illegible]
by Naucratis, types that we shall find again at Rhodes,
they are further represented by examples in greater numbers
and of very superior execution. The author of the ex[illegible]
[illegible], that the ancient vases [illegible]
[illegible] might have been made at Samos and imported from Samos [illegible]
[illegible]; [1] but to support that conjecture, he brings not [illegible]
son, not even the shadow of a presumption.

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of excavations has demonstrated that the same group of interm-ents could enclose vases, which did not seem to have all come from the same workshop. To group those Rhodian vases by series, this could not then be basef on the fact that they had been ex-humed in a certain cemetery rather than another. If these vas-es did not all appear to have come from the same workshop with common traits, there were sensible differences between them to be noted, so that only according to the fabrication and the s style of decoration must be established the distinctions and the classification be attempted.

Note 2.p.414. (Greek). Iliad. II, 656.

Note 3.p.414. Diodorus. XIII, 75. Strabo. XIV, 2-6, 9,11.

In following this method, a classification was proposed that found favor with some archaeologists.[1] The Rhodian vases were distributed in two series, to each of which was attributed a foreign origin. At Rhodes as at Naucratis, men desired to dis-tinguish Miletan and Samian vases; but nothing is known of Mi-letan fabrication and it is by the most arbitrary hypotheses, that some have risked giving it the honor of vases, which have been collected on the sites of cities sufficiently industrious and prosperous to make for themselveu the pottery that they n needed. In what concerns Samos, we are not condemned to an ig-norance so complete as for Miletus. With much common pottery nearly or quite without decoration, there has been collected there enough painted pottery to form some idea of what the ar-chaic Samian pottery was; but in what is divined of it by the-se specimens alone, there is nothing that gives the impression of a very active manufacture, of an autonomous fabrication, whose products had a marked originality. There are found only secondary proofs of types already known to us by Daphnae and by Naucratis, types that we shall find again at Rhodes, where they aee further represented by examples in better preservati-on and of very superior execution. The author of the excavati-ons of Samos says, that the Rhodian vases termed from Fikellou-ra might have been made at Samos and imported from Samos to R Rhodes;[1] but to support that conjecture, he brings not one rea-son, not even the shadow of a presumption.

Note 1.p.415. Böhlau. Aus ionischen und italischen Nekropolen, p. 52. Hugo Prinz in his study on Naucratis adopts in every p

part the theory of Böhlau and does the same with the vases called Samian.

Why be obstinate thus in seeking everywhere than at Rhodes the place of origin of the vases that the island has furnished us in numbers? There is a method assumed, a flavor of a gratituitous hypothesis, which I have not succeeded in explaining to myself. What is known of the prestige of the Rhodian cults and particularly of the cult of Athena of lindos, what remains of the edifices of Lindos and of Camiros, the richness and variety of the equipment of the cemeteries adjoining them, all concurs en attesting that the old cities of the island, as well as Samos, were of those whose normal life in even the bosom of the city comprised the presence of numerous art workers, such as goldsmiths, modelers of clay figurines and ceraimists. To place their works, the latter further did not have to count solely on local patronage. The Greeks of Rhodes did not await the 4 th century to launch themselves on the sea. Posted on t the border of one of the most frequented routes followed from all time in the eastern basin of the Mediterranean, they sau pass and repass in the strait separating the island from the coast of Asia, the Phoenician ships that sailed north or regained the ports of Syria. The example benefited them. When the Phoenicians were driven southward by the expansion of Hellenism and retired from those seas, the Rhodians replaced them there. They commenced by settling on the shores of Caria and Lydia o opposite them. There they founded agencies where they loaded the products of the interior of the continent, grains and skins of beasts, live cattle from the fat pastures of the mountain, metals extracted from mines of the plateau, structural woods from the forests of the Taurus.

The Rhodians did not stop there. Like their neighbors, the Dorians of Cnidos and of Halicarnassus, they followed even to the shores of Egypt the route traced by the track of the Miletan galleys, and then went there to take a part in the founding of the Naucratic amphictyon. Soon even encouraged by the profits derived from the traffic with Egypt, they ventured even into the waters of the western basin of the Mediterranean and they landed in Sicily. The eastern coast of the great island had already received Chalcidian and Corinthian colonies; but the southern coast, that offered no natural shelters comparable

to the fine harbors of Messana and of Syracuse, was still abandoned to the Sicules. Immigrants from Lindos were led by Antiphemos and founded Gela,[1] a city called to brilliant destinies. Rhodian sailors even pushed farther. Perhaps before the Phoceans, they came to the distant shores of Iberia. At the foot of the eastern part of the Pyrenees, they opened an agency later inherited by the Massaliotes.[1] The ancient name of Rhodes still survives in the modern name of Rosas, a Spanish city.

Note 1.p.416. Herodotus. VII, 153. Pausanias. VIII, 46-2.

Note 1.p.417. Strabo. XVI. 2-10.

In the course of those long voyages, the sailors of Rhodes must have taken with them, stowed in the spacious holds of their great barks, cargos of that painted pottery of which they were certain to find a sale both in Egypt and on the markets of the West. There have been collected at Naucratis many fragments of vases so strongly resembling those of Rhodes, that they might well have come from one of the workshops of that island. On the other hand, one of the most beautiful vases from one of the pure Rhodian style known to me, a vase now belonging to the Louvre was purchased from a dealer in Rome about by the painter Emile Levy, several years before the excavations of Salzmann brought to light the contents of the cemeteries of Camiros (Pl. XIXU. According to all probability, this vase came from some tomb of Italy or of Sicily.

In what we now know of those Rhodian cities by the literary texts and the monuments for the most ancient period of their history, there is then nothing repugnant to the hypothesis of a local manufactory of ceramics, one that found its patrons at the place and abroad. What confirms this hypothesis and must seem to remove the last doubts is the fact, indicated to us by a connoisseur, M. E. Pottier, whose competence in these matters is strongly recognized. The correctness of the observation that he has communicated to us can further be verified by all the conservators of museums, that have at hand pieces collected in the excavations of Camiros.

Take those vases from that source, whose fabrication does not denounce them as importe. objects, that are neither from a Corinthian nor an Attic manufactory, and you will prove by examining them in a fracture, that the material is the same as that of the clay statuettes, that have been gathered in great numbers

in the tombs of Camiros. In both is the same [illegible]
also mica. Now if it be proved that the painted vases [illegible]

[illegible]

vail, which popular piety consecrated by thousands in the pre-
cincts of temples, and that relatives or friends buried in the
tombs of their relations. If the Mycenian vases are made of the

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Greek ceramics appears to have interposed a ceramics, th[illegible]
sought all the elements of its decoration in what we have cal-
led geometric motives. This ceramics is represented in the col-
lections formed of the spoils of Camiros, of some vases on wh[illegible]

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this transition may be cited a skyphos with two flat and ver-
tical handles of the fibres of Salzmann (Pl. LVII); but there
is nothing to insist on these vases of transition. We have fi[illegible]
that studied the geometric style, that caused its principle t[illegible]
the extreme and retained longer in European Greece than in Asi[illegible]
and insular Greece, where the tradition of the arts of A[illegible]
then Greece had left more traces. These vases escape the orien-
[illegible] borrows none of its traits from the types of the or-
ient world, and continued to predominate till very late. The sim-
plicity of this decoration was a temptation for the workman,

[illegible]

by beauty of the shape, the quality of the black glaze and the
precision of the lines, it is divined that certain vases of
this sort are contemporaneous with the vases of a much more ad-
vanced style.

The sole vases that we have to occupy us here are those in
which we recognize by the entire character of the decoration
the work of artists, whose minds were aroused by the sight o[illegible]

[illegible]

in the tombs of Camiros. In both is the same rosy clay spangled with mica. Nowif it be proved that the painted vases teaveled much, in the smallest Greek city the coroplaths fashioned at the place in the local clay those little images op very small value, which popular piety dedicated by thousands in the precincts of temples, and that relatives or friends buried in the tombs of their relations. If the Rhodian vases are made of the same paste as the votive statuettes of Camiros and of Lindos, we have reason to affirm that those vases were also executed at Rhodes. There is here a truly Rhodian ceramics in all the force of the term.

At Rhodes as everywhere else, between Mycenaean and archaic Greek ceramics appears to have been interposed a ceramics, that sought all the elements of its decoration in what we have called geometric motives. This ceramics is represented in the collections formed of the spoils of Camiros, of some vases on which the ornamentation comprises lozenges, checks, frets and o other ornaments of the same kind that characterize the style, by the same floral ornaments of the Mycenaean style referred to a geometrized form, if one can so speak. As a specimen of this fabrication may be cited a skyphos with two flat and vertical handles of the finds of Salzmann (Fig. 207); but there is nothing to insist on these vases of transition. We have further studied the geometric style, that pushed its principle to the extreme and reigned longer in European Greece than in Asian and insular Greece, where the tradition of the arts of Achaian Greece had left more traces. Those vases where the ornamentation borrows none of its traits from the types of the organic world, men continued to fabricate till very late. The simplicity of their decoration was a temptation for the workmen, who did not wish to take the trouble of invention. By the happy design of the shape, the quality of the black glaze and the precision of the lines, it is divined that certain vases of t this sort are contemporaneous with the vases of a much more advanced style.

The sole vases that we have to occupy us here are those in which we recognize by the entire character of the decoration the work of artists, whose minds were aroused by the sight of models offered them by the arts of the Orient, and they valiantly attempted to represent life, that of the plant like that of

the animaland of man. In the series of these vases are found forms, that we have described as those of which the Greek potter has made most frequent use; but the Rhodian potter has perfected several of these forms, among others being those of the amphora and of the jar. There was also a sensible predilection for certain types like the plate, which have not enjoyed the same vogue elsewhere.

A model that appears to have been much in favor in these workshops is that of very shallow cups without handles, or rather plates mounted on a wide and very low foot, that were made not to contain liquids. These must have been a sort of dishes on which were placed fruits or other solid foods (Fig. 208). They were decorated and ornamented by borders with a central subject. Some of these pinakes are furnished on each side with a notch, that served as a handle (Fig. 209). It may be asked if the potters took the model from the so-called Beotian or Argive shields with lateral notches. Only on two or three of these plates the foot supporting them is quite high.[1] For drinking cups, here are only found bowls with two handles similar to those found at Naucratis (Fig. 210) and the cantharos (Fig. 211). Nothing announces the kylix of the Attic potters, that deed cup with a high foot, to which these master workmen finally gave such rare elegance.

Note 1.p.420. Longperier. Musee Napoleon III. Pl.LIV.

In what remains of Rhodian ceramics is found everywhere, whatever the decoration, the various types that we have mentioned; but it is otherwise with the decoration. That is far from presenting everywhere the same uniformity. In what concerns it, there are notable differences from certain vases to others, in the use of color, the choice of themes, and also the mode of distribution of the figures in the field. By taking account of all these differences in the entirety of the work of Rhodian ceramists, one can distinguish two styles, whose peculiarities attest variations that taste has suffered in that island from one workshop to another, during the course of the century from which date all these vases. To designate these two styles, we can propose no terms other than these; first and second styles of Rhodes. By the comparison and study of the vases we shall seek to define these terms.

What characterizes at first the vases of what we term the f

distributes his ornaments and figures. On the oenochoes the e entire external surface is divided in zones of more or less h height, that from foot to neck are superposed on each other. (Fig. 212). As for the plates, the difference of form requires a different arrangement of the enclosures. On plates are found parallel zones; but these succeed from the circumference toward the centre, always on the border (Fig. 20), and sometimes even at the middle of the disk (Fig. 208). What most frequently fills the middle part of this circular field is an isolated image of an animal, rarely of a man. This image further does not occupy all the free space. It is cantoned in about two-thirds of this space, the remaining third being separated from the principal field by a transverse band formed by a plait or fret. In this secondary field are found various motives, here a swordfish and a lotus flower (Fig. 213), elsewhere are radiating leaflets (Fig. 214). Everywhere on the plates as on the oenochoes, the painter has scattered around his figures, linear motives of smaller dimensions, such as rosettes and half rosettes, single volutes or coupled in pairs, lozenges, rectangles pitted by great black dots.

This dust of linear ornaments scattered on the field as with open hands is a remnant, a survival of the Mycenaean style, a and even more of the geometric style. That was poorer in motives than its predecessor and is carried farther than it from the horror of the void. To garnish the surfaces of its vases, it must have made more complex these odd combinations of lines and have made much greater use of them. By the habit which it had retained of having recourse to this filling, the first Rhodian style is then related to the two styles, which before it reigned in the entire extent of the lands bathed by the Mediterranean; it announces itself as their heir; but at the same time is inspired by models whose influence did not make itself felt, or made itself felt very feebly on its predecessors. These suggestive models are the works of the industrial arts of the Orient, arts of Chaldea and of Phoenicia. They are rugs w woven in all western Asia' fabrocs of luxury, over which the needles of the embroiderers of Babylonia scattered brilliant and capricious designs. Finally are those cups of metal, ornamented by the chisels and gravers of Syrian workmen, and that

the merchants of Sidon and Tyre distributed on all the coasts of the Mediterranean.

From those rugs and especially from those cloaks and mantles covered by embroideries,[1] as well as from cups of silver and of bronze,[2] the Rhodian potter borrowed the principel of the general arrangement of his ornamentation, when the awakening of Ionian genius came to arouse a renaissance of ceramics, which was long delayed in the poverty and monotonous repetitions of the geometric style. Tapestry and goldsmith's work suggested to it the method that it adopted, the systematic subdivision of the field into parallel zones, that according to a certain form given to the vases on which they were placed, were superposed vertically, or enclosed each other in the horizontal plane. This principle is not that of an art caring to express i ideas, or which wishes to represent either a scene of real life or one of pure invention; it is that of an art aiming only to amuse the eye by a series of images of pretty outlines, and sometimes of strange appearance, images that the painter places in long files, or that he brings together by twos, threes, or in groups of ingenious variety.

Note 1.p.422. Histoire de l'Art. Vol. II, Figs. 443-449.

Note 2.p.422. The same. Figs.398,399,405-409; Vol.III,Figs. 543-553.

Note 1.p.423. Fig. 212. Oenochoe. Louvre. Hall A. Musee Napoleon III. Pl. LVII. Height 1.15 ft.

For those of its vases whose form was developed in vertical elevation, it was particularly tapestries and embroidered fabrics that inspired the potter. On those oenocheos for which he seemed to have had a marked preference, he never placed anything but files of real or factitious animals.

Even by its form, the plate suited the painter changed to m modify this arrangement. The bordes there lent themselves verr well to the continuity of the processional decoration; but the central medallion that is circumscribed by this band appears to call for an isolated figure, that takes possession of the free field, which is spaced there an developed at ease. That is the method on which the decorator decided for most of those plates. In this middle space he has placed a passing sphynx,[1] a chimera,[2] elsewhere a bull that turns his head back (Fig. 215). Perhaps the bull here personifies, as frequently the case on

coins and especially those of Sicily, one of the rivers or rather torrents of the island. For other plates, the painter is nearer the system followed by the decorators of jars. What forms the decoration on these plates is a series of concenbric bands. Here is one of these bands, that by the elegant heads of birds, which rise between these groups of cuneiform lines, really assumes more importance than the central motive.[1] This was no longer a mere flower composed of radiating petals (Fig. 215). Certainly the ornamented cups rather than tapestries furnished painters of plates with the plan of their decoration, and the met.l cups offer us the same variants of the general arrangement as the clay plates. There are cups, where the workmen renounced the use of the central medallion to place there a figure or group of figures, but has filled only by a rosette or a series of rosettes.[2]

Note 1.p.425. Longperier. Musee Napoleon III, Pl. LII.

Note 2.p.425. The same. Pl. LIII.

Note 1.p.426. Elsewhere in another cup much resembling what we have reproduced are heads of birds that are found also on the exterior. (Musee Napoleon III. Pl. LIV, bottom).

Note 2.p.42_. Histoire de l'Art. Vol. III, Figs. 482,548,552.

The first Rhodian potters perhaps took from Asian tapestries something other than even the elements of their decoration. O One can ask if it was not also those tapestries that might have suggested to them the choice of color adopted on their jars, for the grounds of pictures, that of this coating which is its novelty must be a slightly creamy white, and which by the action of time has taken on the best preserved vases a tint sometimes of amber and sometimes slightly olive in places. The tone of this coating recalls the weakened white of unbleached wool or the brighter white of linen cloths freshly washed. It was on a light ground that as now on the tunics of Albanian or Wallachian women, must have been most frequently executed the designs of those embroideries, which the agile hands of Syrian slaves excelled in tracing, "knowing the beautiful works," whose skill is boasted by Homer.[1] With black or gray threads, the needle mingled the threads that gleamed with the brilliancy of the purple with which they were saturated in the vats of Phoenician dyers. This mixture of dark and of bright colors w was imitated by the brush of the painter and obtained on clay

by the use of touches of violet that he laid on the brown or black of his figures, as well as by the reserves arranged on certain places, allowing the white of the ground to appear. The vase that we have reproduced here with the colors of the original (Pl. XIX) must please for the same reasons that caused the Ionians to seek the masterpieces of embroidery, brought to them by the caravans from beyond the Euphrates or by Phoenician ships. This is the same general effect, so far as permitted by the difference in materials. There is on the clay as on the linen the same succession of images, that charm the eye w without imposing any effort on the mind, the same juxtaposition of dark and free tones, combined in a happy fashion and in a soft and gay harmony.

Note 3.p.426. Greek. (Odyssey. XV, 418). See Iliad,VI,289.

Yet there came a time when, perhaps under the influence of other foreign models, the ceramic painter allowed himhself to repeat always the same outlines that aroused no thought in the mind. From the end of the 5 th century, Corinthian vases had begun to appear on all the markets of the Mediterranean, and as the excavations have proved, they even came to Rhodes. Of himself or by virtue of this suggestion, the potter conceived the idea of a decoration with an entirely different principle, in which he would have a subject, whose sense being perceived by the mind should leave there a memory. This new system of ornamentation was tried on vases of the amphora type, and these amphoras represent what we term the second Rhodian style; but in this attempt is all the timidity of a beginning. The theme there is still of extreme simplicity. On one of these amphoras is seen a man with the head of a hare (Fig. 216), and on another a man has the paws and head of a lion (Fig. 217).[1] Both a are running. There are perhaps images of genii to whom popular superstition at Rhodes lent these bizarre traits. On another amphora from the same source is a fanciful subject that one m meets with, a hunt for a hare (Fig. 218). Finally, as it has been thought, it is proper to attribute the same origin, according to the entire fabrication and the character of the ornamentation, to an amphora of unknown source that belongs to the museum in Altenburg.[2] If we accept this attribution that seems very probable, the Rhodian painter would have ended by using the human figure to ornament his vases. All around the handle

there in the spacious light field that occupies the middle [illegible]
[illegible]
mos, of one of those foolish dances that follows a festiv[illegible]
[illegible]
lons, bound with gestures of joy around a great crdos placed
on a support, near a large basin from which they have taken [illegible]
the drunkenness that transports them. Before this vase is [illegible]
[illegible]
ground. Two dancers hold jugs in the right hand. The ot[illegible]
[illegible]
The drawing is far from being correct; but the movements [illegible]
true and lively. In all these attitudes is a spirit that well
gives the impression of a scene of Bacchic delirium.

Note 1.p.423. This amphora did not come from the excavation of Salzmann. Its source is uncertain; but by its shape and ornamentation it strongly resembles the preceding, so that there may be every reason to attribute it to Rhodes.

[illegible]
[illegible]
places in that list are vases of Camiros, according to his ca[illegible]
[illegible]

Whether it is an error or not to place this curious vase to the credit of a workshop of Camiros, the evidence for which [illegible] this source is certified suffices to show how much the methods then used by the ceramist differ from those to which he was attached at first. On vases of the primary style, the or[illegible]
[illegible]
the entire surface of the piece. On the contrary, on vases of the second style, however weak may appear the interest of [illegible] theme that the artist has chosen, he seeks to call atte[illegible] to this theme, and he isolates it for that effect. He is [illegible] times satisfied to arrange a great void on the middle of [illegible] the image assumes all its value (Fig. 216). In this free f[illegible]
[illegible]
[illegible]
elegance do not hold the eye of the spectator. On [illegible]
[illegible] the field is still more empty. The painter has placed t[illegible] a swan that throws its head back. Under each handle is a [illegible] stem with two scrolls joined by a lanceolate leaf (Fig. 21[illegible]).
[illegible]

there in the spacious light field that occupies the middle between a garland of water leaves and a fret is an image of a komos, of one of those foolish dances that follows a festival. Nude young men, with no clothing other than drawers about the loins, bound with gestures of joy around a great dinos placed on a support, near a large basin from which they have taken t the drunkeness that transports them. Before this vase is a musician playing the double flute. An oenochoe is placed on the ground. Two dancers hold jugs in the right hand. The others p play with the cups that their comrades will soon fill anew. The drawing is far from being correct; but the movements are true and lively. In all those attitudes is a spirit that well gives the impression of a scene of Bacchic delirium.

Note 1.p.428. This amphora did not come from the excavations of Salzmann. Its source is uncertain; but by its shape and ornamentation it strongly resembles the preceding, so that there may be every reason to attribute it to Rhodes.

Note 2.p.428. Böhlau(Aus ionischen, etc. p. 56) places this amphora among what he calls Samian vases. Nearly all that he places in that list are vases of Camiros, according to his own indications, of what we term the second style.

Whether it is an error or not to place this curious vase to the credit of a workshop of Camiros, the amphoras for which t that source is certified suffice to show how much the methods then used by the ceramist differ from those to which he was attached at First. On vases of the primary style, the ornamentation is diffuse and continuous, uniformly distributed over the entire surface of the piece. On the contrary, on vases of the second style, however weak may appear the interest of the theme that the artist has chosen, he seeks to call attention to this theme, and he isolates it for that effect. He is sometimes satisfied to arrange a great void on the middle of which the image assumes all its value (Fig. 216). In this free field, at both sides of the genius with the head of a hare are nothing but two ample palmatiums with volutes, that in spite of their elegance do not hold the eye of the spectator. On another amphora the field is still more empty. The painter has placed there a swan that throws his head back. Under each handle is a palmatium with two scrolls joined by a lanceolate leaf (Fig. 220). These plant ornaments occupy a small space on the vase of the

hare chase (Fig. 218); but also they leave bare the entire top of the body, where is seen the dog throwing up the hare.

On all the amphoras, the painter is careful to leave the body bare, but is forbidden to decorate the neck, which in that organism that constitutes the vase, has its separate existence and rule. He is often contented to place a fret there; but on the hunting vase, he has made more complex the ornamentation of the neck. He has drawn there two great eyes with enormous pupils between the eyelids much elevated at their outer ends. This is the sort of ideogram that plays the part of a talisman, like the phallus sculptured at the gates of cities. On all these vases at the junction of the neck and shoulder, the brush has traced a garland of opened flowers or buds, that by the place occupied recall a necklace falling on a woman's neck.

Elsewhere, for example on the amphora of the genius with a lion's head (Fig. 217), the painter has marked even more clearly his desire to provide the image. As on the situals of Daphnae (Fig. 187), this is enclosed in a sort of metope within a compartment, which by its lighter color shows on the very dark tint by which the rest of the vase is covered. In that fashion is obtained the desired result, though at the cost of some durability. The general appearance was a little gloomy.

From the time that he thus understood the decoration, the p painter could not continue to encumber the field, to lavish t those linear ornaments there, that swarmed there until then l like mushrooms in the forest. So that this field should lend itself to the presentation of the image, he must clear it and remove the bushes, if one may so speak. This is what he has done for his amphoras. Around the principal motive, he has no longer placed only those light palmatiums, which are placed at a distance and accompany the figure without depriving it of a air. In these conditions, it is not without some surprise that one studies the decoration of the two plates found at Camiros by Salzmann. One of them represents the combat of Hector and Menelaus, who disputed about the corpse of Euphorbus.(Fig. 221), and the other seems to represent Perseus fleeing before the Gorgons (Fig. 222). By the character of the picture by which they are ornamented, these two plates are those most advanced in Rhodian ceramics, which causes to be better foreseen the e evolution that the Ionian ceramist prepares to accomplish .

The ceramist to whom we owe these two plates has made a great advance, when to arouse in his patrons a curiosity that had been so much wearied by so many monotonous replicas, he thought of seeking his subjects in the repertory of those temples, whose whose hymns enlivened the banquets of princes and the religious festivals of the city, in the rich treasure of those myths infinitely diversified by a poetry born on Ionian shores. From this fact, these two paintings belong to the second Rhodian s school, to that whose brush no longer limits its ambition to rival the shuttles and needles of the weavers and embroiderers of Asia.

This being fixed, there is difficulty in explaining that the painter had accumulated there around these personages which he took all living from the epic period, those dead ornaments, s squares, lozenges, fylfots, legaciess out of fashion from another age. In the battle scene at first view, this confusion of ornaments embarrasses the eye, it does not seize them and does not follow at once the contours of the three bodies engaged in the action. There is produced a sort of conflict between the thought of a boldly innovating master potter and the habits of a workshop, from which the workman executing the ornamentation could not free himself.

In the entirety of the Rhodian ceramics, these two plates o occupy a place too much apart, that there may be reason to describe them in some detail.

A glaze of light yellow is placed on the ground of the vase of Euphorbos.[1] For the personages and the various motives of ornament, that are scattered in the field, three colors have been employed. A darker yellow renders the nude of the members. the greaves, the armor and the bell of one helmet are tinted white. A reddish purple served for two helmets and for the crest of the third. A frank black outlines the org of the shields and that blazon that decorates them. Near the actors in the scene are inscribed their names, and in that of Menelaus is a lambda od a form peculiar to the Argive alphabet. On this weak indication, it has been desired to suppost that the vase in question was executed at Argos; but Argolis has never furnished a single fragment od a ceramics which resembles that of Camiros.[1] Is not the presence of this letter further explained by the fact that the city of Argos had furnished a part of the

Greek colonists, that came to replace the Phoenicians at Rhodes? [2] The colony must have retained relations with its metropolis; perhaps for a certain time it had borrowed the alphabet which the latter used in its public acts. In any case, the technics here is similar in all parts to that of the other pottery that has been collected at Camiros. Then there is no reason to separate the plate in question from its congeners.

Note 1.p.433. Homer. Iliad. XVII. The idea of a combat fought over the body of Euphorbos between Menelaus and Hector appears to be borrowed from aversion of the poem a little different from that which has come to us. In our text, Menelaus indeed slays Euphorbus, who attempted to carry off the corpse of Patroclus (V. 9-60); but when Hector comes to the rescue, Menelaus escapes and returns to the line.(V. 106-107). There is not the single combat between the two heros concerning the spoils of Euphorbos.

Note 1.p.434. This is attested by Furtwängler, beneath whose eyes had passed fragments of pottery discovered by Waldstein on the site of the Heraeum of Argos. He rejects without hesitation the hypothesis of the Argive origin of the plate in question. (Berl. phil.Woch. 1895, p. 201).

Note 2.p.434. Thucydices. VII. 57.

The technics is nearly the same on the other of these plates. It is believed that there is reason to recognize Perseus by t the dog that accompanies him, by the little wings attached to the lower part of his legs above the laced boots. The little basket that the runner holds in his hand would have been intended to receive the head of "edusa, when the conquering hero h had slain the monster. Here and in the other picture the proportions of the figures are slender, the members are rather thin. The line lack accent. One divines that the painter is not yet accustomed to represent the human body, and is tempted to believe that the two vases came from the same workshop.

As on an amphora represented above, then the drawing here h has a character not entirely the same as on the vases of the first group. On the oenochoes it is recommended by that slightly dry precision in which is felt the frank application of the archaic artist. On Vases of the second style the design is freer; but it is a little loose. One feels there the facility of

a hand confident in its skill, that goes a little too fast and does not oversee with rigor.

These vases are also distinguished by other peculiarities. On the jars with files of animals, and on plates where they a appear, there is no engraving with the point. Laways by lights arranged in reserve or by touches of white are indicated the internal details of the figure. On the contrary, on the amphoras, incisions serve the painter to draw the articulations of the members and all the muscular system (Figs. 216, 217, 218).

Finally, on vases of the second group, we have more vivid a and more varied colorings than on vases of the first group. S See the amphora with the genius with a lion's head (Fig.217). Its entire body is black and about the middle of the body of the vase, there is detached a black figure set in a white panel. See also the two paltes of Euphorbus and of Perseus (Figs. 221, 222). On a coating of pale yellow are placed four other tones, a more vivid yellow, a reddish purple, white and black. This is a sort of illumination. It is no longer reserved polychromy of the oenochoes, on which the firmness of the black outlines and their red touches is tempered by the lights in r reserve, that allow the reduced white of the coating to reappear.

We believe that this study will justify the proposition that we have made for distinguishing two styles in Rhodian ceramics. The painter of the first style, elevated and inspired by the Syrian and ;ydian weavers and embroiderers, is only a decorator. As again today the marvellous workmen to whom is due the Persian rugs, Indian shawls and Japanese silks, he thought only of charming the sight by the capricious grace of the ornament, by the symmetrical arrangement and multiplicity of figures, where they mingle and pass into each other, are combined in different ways, forms borrowed from certain species of animals.

He recalls this animal life by way of illusion rather than pretends to represent it faithfully, in all the diversity of the incidents and of actors that this implies. If he has seized with intelligent accuracy the characteristic traits of certain animals, such as the birds of the marsh and the cervidae, he always shows them as if fixed in the same attitudes. In fact, he does not attribute to them any value other than that of or-

ornaments of a particular kind, ornaments that lend themselves to indefinite repetition. In all these pictures there is no s subject. On the contrary, on the vases of the second style is a subject, which to attract attention has a void around it. T This subject is sometimes an isolated figure and sometimes a group of combatants or of dancers.

There is a question, which appears of itself before the historian, when he has finished drawing up this inventory. Are t the vases of two styles contemporaneous, that we have attempted to define? To explain the differences that distinguish them, does it suffice to assume that there were in the island at a certain time several rival workshops, each of which had its own manner of understanding and executing the decoration of i its vases? we do not believe that this hypothesis may be that which best accords with the whole of the facts mentioned by us. Among them are some that may seem to have but a moderate importance, and yet it is proper to take them into account. T The vases of the second group are the only ones, on which for the indication of certain details the painter may have preferred to use the graver than the method of reserved lines, or of lines traced with a brush charged with white color. Now there are serious reasons for regarding the Corinthians, accustomed to work in metal, as the inventors of the process of incision applied to the clay of painted vases.[1] We see this process already employed on those of their vases having the most archaic appearance, for example on the pyxis of Chares at the Louvre. On the contrary, no use is made of it on those Ionian vases, which by the simplicity of the data of their ornamentation appear to be the most ancient of all. It thus seems that to learn to handle the graver, the painter in the workshops of Asian Greece awaited the time when the products of the Corinthian m manufacture had commenced to be placed on the markets of Ionia. But the Greeks of Ionia having preceded those of Europe in the ways of art and in those of poetry, there was reason to think that the kilns of Miletus and of Rhodes had burned long before those of Corinth were lighted. When at the suggestion of the foreigner, the Rhodian adopted the new process, he already had behind him an entire past, that of a ceramics when the brush could perform its task without calling for the aid of the dry point.

Note 1.p.436. Pottier in Monuments et Memoires.(Foundation Piot. Vol. I, p.47.

Yet what is still more decisive for the chronological classification of the Rhodian vases is uwhat is called the psychological reason. In the order of the normal development of the faculty of relief, vases on which the decoration is pure ornament are earlier than those on which the ornamentation aims at becoming a picture, a painting whose subject is taken either from a poetic fiction, or from sights offered by the daily life if view of the workman. He would not be put to the trouble of invention, while he was contented to borrow from his oriental models their traditional motives, that he transfers while adapting them to the special conditions of the trade, not without putting into the execution of these images the qualities of design that properly appertain to them. What arouses him to the effort to inaugurate a new system of decoration was the encreasing place that poetry and the art which interpreted it t took in the life of an intelligent and sensible people, passionately enough charmed with beauty to wish to place it everywhere, even in the smallest objects that the hand of the artisan fashioned for his purposes. It was to respond to this need, to this desire of all, that in Asian as in European Greece the potter was emboldened to take a method whose example had been given to him by none of his predecessors, neither by the indirection of Egypt nor by that of the Chaldeans. Of the clay vave, that its material and form appropriated it to all the uses of domestic life, he made if not the rival, at least the complement and the reflection of works of great art, those of the painter of frescos and of the sculptors of the friezes of the temple. Like those artists, in the fields at his disposal he caused to appear the gods adored by his people, and the heros whose exploits were sung by the poets. He also projected there as in a faithful mirror the image of the scenes, that Grecian life, the public and private life of the city, offered to his curious eyes. The most common vases, the hydria and amphora, jar and cup, thus became the supports of many scenes, of which each represented with more or less success a scene from real life or retraced some episode of that ideal and fabulous history, where for long centuries the Greek mind, that had the honor of having created the story, felt itself more at ease

and found more pleasure than even in the plain tales of actual history.

At the same time that he reaches this conception of the decoration, the Rhodian ceramist also modifies the composition of his palette. Two tones, black with its accidental variations and reddish purple had sufficed him while he only had to imitate the tranquil harmony of embroidered fabrics on a light ground; but here he undertakes to place on the clay personages on whom he must distinguish the nude from the parts of the body covered by the drapery and emphasize certain details of the clothing and armor. Then at Rhodes as at Naucratis and elsewhere he feels the need of varying his tones more and of giving them more vigor. He employs yellow beside red, he manages a h hard fontrast between the frank black and touches of pure white. He preludes that slightly shocking polychromy, that we find in other series, on vases found in Italy and that do not tell us where they were made, but which by their characteristics and their tecnnics still appear to have left some Ionian workshop. If I have insisted so much on Rhodian ceramics, this is because of all Ionian ceramics, it is that known to us by the greater number of monuments of an assumed origin, and of which many are very well preserved. Of the different workshops of European Greece, whose existence we have so far proved or conjectured, that of Rhodes is the only one whose production is represented in the museums, not merely by scattered fragments, but by a notable quantity of entire or nearly entire vases. By that material brought from the cemeteries of Camiros, we h have been able to follow the Rhodian ceraimist in his entire evolution from the time, when at the signal given by the awakening of the Ionian genius and the aid of oriental models, he disengaged himself from the complications of the geometric style to gradually arrive by a continued progress, to give to t the character of the painted vase that narrative character to which Greek ceramics will owe its originality.

If it be according to the vases found in the island itself that we have described and defined Rhodian ceramics, with the two styles that we have distinguished in its production, there is still reason to believe that from the time when the first of these styles flourished, Rhodes exported vases into Sicily and Italy. To make as complete as possible the list of works

from the Rhodian manufactory, that have come to us, there is reason to carry to its credit certain vases that came from Etruscan cemeteries. This is the case for more than one of the vases scattered in the museums, that have been classed as Miletan or Samian, and particularly for that belonging to the little Saxon duchy, on which we have recognized a representation of the komos (Fig. 219).[1] This can be affirmed on the subject of the so-called Levy vase, of which we have adhered to giving a faithful image, because it appears to us to be the most beautiful example of the type of Rhodian oenochoe, that has reaceed us. (Fig. 223 and Pl. XIX).

Note 1.p.438. Böhlau. Aus Samischen etc. p.53-69, notes 3, 6, 29, 30.

This oenochoe is possessed by the Louvre. There is every reason to believe that it was found in Italy, as stated by the d dealer that sold it about 1855 to the painter Emile Levy, its first possessor. This was much before the campaign of Salzmann; no one had yet excavated at Rhodes. In its kind, this vase is an admirable work of art. "No other example of this Rhodian series could rival it in the solidity of the coating, the delicacy of the execution, the precision of the drawing or the abundance of ornaments. On the shoulder, a floral motive joins water birds, griffins, a sphynx, deer, etc. The body is divided in three zones of passing animals. Three zones of ibexes alternate with two xones of deer with spotted bodies. The field is everywhere filled by geometric ornaments, rosettes, fylfots, concentric circles and semicircles. In this known decoration are discovered ingenious details, that prove the pleasure taken by the Ionian artist in placing in his paintings the most conventional of traits, which would recall life, the unforeseen and its infinite variety. Thus has he broken the monotony of his files of deer by turning the heads of one file in the other direction. Elsewhere there are swallows perched on the tail of the sphynx. And those of the griffins, or indeed on the rosettes scattered in the field."[1]

Note 1.p.440. Pottier. Catalogue. p. 524.

5. General Character of Ionian Ceramics from the Vases collected in European Greece.

With the fragments gathered from the mouths of the Nile to the shores of the Hellespont, on all the coasts of the eastern

Mediterranean, especially on the vases of Rhodes, we have surveyed all of Ionian ceramics that has been found in the country of their origin. If one recollects and brings together all facts that he has noted in the course of this research, he could be tempted to define with a certain precision the characteristics that distinguish Ionian ceramics regarded as a whole, from other Greek ceramics, the Corinthian and the Attic; he could form a just idea of the tendencies and the taste that reigned in the Ionian workshops in the 7 th and 6 th centuries. It is by the retaining of this difinition that we can decide in what measure one is right on referring to the Ionian family fertain vases found either in the islands of the Egean sea or even in Etruscan cemeteries, whether these vases are regarded as made in the same workshop of Asian Greece and carried afar by commerce, or that they are seen as the products of a workshop whose chief had suffered the influence of Ionian art, and had adopted its methods and types. The vases that we have examined so far will serve us as a criterion. These will be so many authentic documents, according to which we shall appreciate the Ionizing vases, which we shall find scattered over other coasts of the Mediterranean; we shall thus come to judge of the degree of relationship. This is what paleographs do when they are compared to the manuscript in which they recognize the archetype, as they say, the later manuscripts and those of secondary importance.

Here then are those fundamenta, characteristics, such as they appear to us to result from the study which we have undertaken. As for the forms, Ionian ceramics has renounced some of those in use in the Mycenaean epoch. Here is no longer found the amphora with stirrup, the goblet with one or two handles, the cup with a tall and slender foot, the horn nor the flask. Other shapes have been retained, because they responded to certain needs of daily life. Such are the amphora and the oenochoe. The amphora was formerly much swelled and very heavy.[1] Here it is reduced and its sides brought nearer. The foot, shoulder a and neck take a contour with more accent; the articulations of this clay body are more freely drawn. The handles are enlarged and are detached from the body. The entire curve of the body becomes more elegant and one feels that are sketched the beautiful lines and happy proportions of the Attic amphora of the

5 th century (Fig. 216). It is the same for the vases which r resemble what is vulgarly called the jug. In all the work of the Mycenaean potter, I know only one ewer, that if copied in some piece of goldsmith's work would have an outline truly pleasing to the eye.[2] Other vases of that kind are of low and squat height, of heavy and slightly awkward shape.[3] The Rhodian oenochoe with its trefoil spout, short neck, graceful handle in volute form overhanging the mouth and its wide body, leaves little to desire (Fig. 224). There will suffice slight retouches for this to reach later in this kind a perfect form. A type that is seen to appear here for the first time is that l like the sketch of the lecythe, an elongated flask with two little handles (Fig. 225). Finally, here is a new model that appears to have been especially in favor in the workshops of Rhodes. It is that of those plates with decorated borders and central subjects, many examples of which have been furnished by camiros, and that we have found again at Myrina and Cnidos. (Fig. 215). A type that seems to have been much liked at Naucratis is that of the bowl (Fig. 193). There are also cups of small depth that are sometimes very richly ornamented. It suffices to recall that where the head of a woman, modeled in relief, decorates the handles where they are attached to the vase. (Fig. 192).

Note 1.p.441. Histoire de l'Art. Vol.VI, Figs.464,466,479,485.

Note 2.p.441. The same. Fig. 486.

Note 3.p.441. The same. Figs. 436, 457, 465, 470.

What characterizes Ionian ceramics more and better than even these innovations in relief is the method taken in the use of colors. Doubtless after a primary and slight firing, extended over the clay a very thin coating of creamy white or of pale yellow, that closed the pores of the clay, and this made smooth surfaces for the painter over which his brush could run. He p painted on this coating with two tones, black that gave the e entire outline, and a vinous red, which served to mark the details of the muscles, costume and armor. With a poorer palette, this was the same method as for fresco.

The effect of the images on the ground then is here nearly the same as in fresco. If the most ancient potters of Ionia took their floral motives and their files of real or factitious animals from oriental tapestries, what suggested to them

the idea of a taste for their light coating was perhaps the w whiteness of the grounds.of the embroidered fabrics; but it is also that of the coating in the edifices of the city from which rose the figures of the pictures of the historical painter.

From various indications, we have believed it possible to c conjecture that the colors of mural paintings in Ionia were more vivid and more varied than those of the paintings of the same kind, that were traced about the same time by the brushes of the artists of Corinth and of Sicyon.[1] There was already a a reflection of this polychromy and of its charm in the decoration of the Rhodian oenochoes, where the brown of the images with its touches of vinous red were detached without violence from the tranquil softness of the ground; but it was doubtless to follow still more closely the examples given by monumental painting, that the ceramist a little later added other tones to his palette, placed yellow there beside red and violet, since he lavished touches of white on the black (Fig. 191). The same tendency manifests itself in the care taken in places to cover by a coating of free black the internal surfacer of vases, whose exteriors were covered by a light glaze. On this black he projected ornaments executed in red and white. It is divined that he took pleasure in this contrast and this diversity of tints, in this florid appearance offered neither by Corinthian or Attic vases.

Note 1.p.442. Histoire de l'Art. Vol. IX, p. 218-220.

If the glaze gave Ionian vases something of that smiling freshness and brilliancy, and ceramists among other people held to place on all there work, it had a serious fault; it lacked durability. Unlike our faience, this was not an enamel that t the fire melted and fixed on the clay. Made of a powdery material, even before firing, this coating had but a feeble adhesion to the clay; under the action of dampness it was easily detached, and in falling it carried with it the colors for which it served as a ground. Greek potters never knew well how to p provide against this inconvenience of painting on a white ground. When those of Athens in the 5 th century applied this method to their funerary lecythes and to cups, of which some are marvels, they succeeded no better in this undertaking.

By giving the value taken by the least black line on the pale

tude of the trials, the present ... that the painter has typ... [illegible] ... to derive from the treaties of these lines ... [illegible] ... of expression. In fact that these had ... [illegible] ... images like ... [illegible] ... with which the potters of the Dipylon satisfied ... [illegible]

the imitations of the form, the roundness of the torso and ... flexible articulations of the members. He then took the ... of the mode of copying that had prevailed in Europe after the Dorian invasion, and he freely represented by a single li... drawing either single figures or parts of figures; this was a example specimens given to him by Mycenaean artists.[1] Likew... on the Mycenaean vases, the head and legs of animals are o... only rendered by simple lines, which outline their contour and sometimes fix certain internal details, while a dark ti... extends over the entire body (Fig. 213). Even the painter ... [illegible] ... by placing nothing there to accent either the va... [illegible]

now he succeeds in making up at least in rendering these dis- tinctive peculiarities of color and of form; in the black tha... fills the entire interior of the outline, he has arranged vo... [illegible]

skins of certain deer; these are rather narrow stripes or ... there are lines, which model the torso or that mark the st... movements of the muscles. That is what is called the method ... lines in reserve.

Note 1. ... Mycenaean ... [illegible] ... 474, 473, 455, 456, 454, 493, 496.

Note 2. ... Louvre. Hall A. 211, 321, 330 etc. On a fra... ent from Naucratis, it is by touches of white and not by re... ved lines that is indicated for the lion the joints of the ... [illegible]

[illegible]

cost of a very careful ... of hand, that the painter succ... in obtaining these preserved whites, whose places and dime... [illegible]

tint of the field, one understands that the painter may have been inclined to derive from the tracing of those lines all h his means of expression. He felt what these had imperfect and ungraceful as images of life, these opaque images like cast shadows, with which the potters of the Dipylon satisfied themselves. They seemed to him to lend themselves badly to render the inflexions of the form, the roundness of the torso and the flexible articulations of the members. He then took the reverse of the mode of copying that had prevailed in Europe after the Dorian invasion, and he freely represented by a simple line drawing either entire figures or parts of figures;this was an example sometimes given to him by Mycenaean artists.[1] Likewise on the Rhodian vases, the head and paws of animals are often only indicated by simple lines, which outline their contours and sometimes fix certain internal details, while a dark tint extends over the entire body (Fig. 213). Even the painter usually has not consented to leave this central mass vaguely indeterminate, by placing nothing there to accent either the varied tints of the clothing or these elongations, shortenings or thickenings of the body, that idderentiate the species. See how he succeeds in noting or at least in recalling these distinctive peculiarities op color and of form; in the black that fills the entire interior of the outline, he has arranged voids where the white coating remains uncovered. Those voids are sometimes irregular spots, that represent those that dapple the skins of certain deer; these are further narrow strips cast t there like lights, which model the torso or that show the atachments of the members. That is what is called the method of lines in reserve.

Note 1.p.444. Histoire de l'Art. Vol. VI, Figs. 465, 467, 474, 476, 486, 490, 491, 493, 496.

Note 2.p.444. Louvre. Hall A. 311, 321, 330 bis. On a fragment from Naucratis, it is by touches of white and not by reserved lines that is indicated for the lion the joints of the shoulder and thigh.(Jour. Hell. Studies. 1887. Pl. 79,our Fig. 196).

This mode of working has its difficulties. It was only at the cost of a rare certainty of hand, that the painter succeeded in obtaining those reserved whites, whose places and dimensions he must foresee in advance. he also sometimes had recourse to

an expedient which gave me nearly the same effect. [illegible]
vases from Naucratis and from Rhodes the artist, to arrive [illegible]
the light notes of which he did not intend to deprive himself,
substituted for the reserved lines touches of white placed on
the clay.[1] He has elsewhere made particular use of this proce-
dure for the secondary parts of the decoration, for the orna-
mental motives.

This means was not the only one of which the painter dispo-
[illegible]
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-ned these accents from the play of the brush; but in other
workshops, another mode was taken to obtain them. Men had imi-
tated the procedures of the goldsmith and of the bronze-worker
[illegible]
that left the mould or was fashioned by the hammer. The potter
had learned to handle the point of the chaser, and just as the
[illegible]
his cuts across the image. Wherever they removed the color,
was caused to reappear the yellow or red of the clay. This is
what is called the method of incised lines. It is unknown when
the first attempt was made; but what made its success is
that it was more rapid than that of the reserved line. Unlike
that, it did not compel the painter to stop his brush wit[illegible]
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permitted him to allow it to run more freely over the sur[illegible]
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er removed it, armed with another tool, to place on it more or
less chasing at his pleasure.

[illegible]
-trians hasten to apply this process to all vases that left th-
eir kilns. The Corinthians and especially their workers and m[illegible]
chants who held to produce quickly to sell much. As for the
Ionians, much more artists in their souls, they loved color
too much to admire a method, that tended to exterminate viva-
cities and lessen contrasts. On the Rhodian oenochoe with [illegible]
[illegible]
of them in the series of plates of the same origin and of the
same style, no more than on the sarcophagi of Clazomenae,
even on those appearing to be most recent. This procedure was
repugnant to Ionian taste. If the practice of the workshops [illegible]

an expedient which gave me nearly the same effects. On some v vases from Naucratis and from Rhodes the artist, to arrange t the light notes of which he did not intend to deprive himself, substituted for the reserved lines touches of white placed on the clay.[1] He has elsewhere made particular use of this procedure for the secondary parts of the decoration, for the ornamental motives.

This means was not the only one of which the painter disposed to insert in the field of the outline the internal detail, the accents that rounded the figure. The Ionian ceramist required these accents from the play of the brush; but in other w workshops, another mode was taken to obtain them. Men had imitated the procedures of the goldsmith and of the bronze-worker, those employed by them to perfect the decoration of the piece that left the mould or was fashioned by the hammer. The potter had learned to handle the point of the chaser, and just as the former engraved on metal, he had engraved on clay, carrying h his cuts across the image. Wherever these removed the color, was caused to reappear the yellow or red of the clay. This is what is called the method of incised lines. It is unknown where the first attempt was made; but what made its success is, that it was more rapid than that of the reserved line. Unlike that, it did not compel the painter to watch his brush without ceasing to avoid irreparable encroachments of the color; it p permitted him to allow it to run more freely over the sides of the vase. Once that the image was entirely colored, the workmen removed it, armed with another tool, to place on it more or less chasing at his pleasure.

This convenience of working and its rapidity made the Corinthians hasten to apply this process to all vases that left their kilns. The Corinthians had especially been workers and merchants that held to produce quickly to sell much. As for the Ionians, much more artists in their souls, they loved color t too much to admire a method, that tended to exterminate vivacities and lessen contrasts. On the Rhodian oenochoes with pands of animals, there are incised lines nowhere; there are no more of them in the series of plates of the same origin and of the same style, no more than on the sarcophaguses od Clazomenes, even on those appearing to be most recent. This procedure was repugnant to Ionian taste. If the practice of the workshops e

[illegible]
[illegible] and introduced into that country the procedure of Corinthian [illegible]
[illegible]
ces by many vases, small and great. The Ionian workmen [illegible]
ly allowed themselves to be tempted by the facilities offered
them by this mode of execution, but the use that they made of
it usually remained very cautious. Thus on the fragments of a
pieces in the Ionian style found at Naukratis, the bodies of
the animals are modeled by white reserves, while there are li-
nes incised in the black recesses that outline the [illegible].
[illegible]. [illegible]).[1] [illegible]
and bands of passing animals. In the upper one the decoration
is by opaque images and incised lines; in the lower one, it
is by reserved lines.[2] At length it occurred that the Ionian
ceramist employed together on the same piece all the procedu-
es, examples of which he found on the very varied types [illegible]
under his eyes by the ever increasing activity of commerce.
This is the case for a plate from Naukratis.

[illegible]

Note 2.p.443. C. Smith. Early paintings of Asia Minor. p.152
[illegible]
Hell. Inst. 1884. p. 159, no. 2889. Pottier has published a
cratera of the Louvre on which the decoration shows the same
mixture of the two procedures (Cratère grec de style Corinthi-
[illegible]
that vase was discovered in Italy. Pottier believes it to be
[illegible]
the issue of an Ionian workshop.

[illegible]
body in opaque black, with head and paws in black outline on
the ground of the white covering. The masses of hair, the [illegible]
[illegible] on the chest and some small muscular details of the paws
are incised; others are reserved. Finally the edge of the cir-
cumference and certain lines of the wing are detached in white
[illegible] of five technics represent the successive accumulated [illegible]
several centuries. (Black image, black line on light ground,
white line on black ground, reserved lines, incised lines. [illegible]
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[illegible] a single and simple method.[3] The Corinthians first [illegible]
then the Athenians simplified it.

ended in admitting these in Ionia, it was only after commerce had introduced into that country the products of Corinthian f fabrication; those are represented in the excavations of Camiros by many vases, small and great. The Ionian workcen gradually allowed themselves to be tempted by the facilities offered them by this mode of execution, but the use that they made of it usually remained very cautious. Thus on the fragments of p plates in the Rhodian style found at Larissa, the bodies of t the animals are modeled by white reserves, while there are lines incised in the black rectangles that ornament the border. (Fig. 206).[1] On an oenochoe of Rhodian origin are two superposed bands of passing animals. In the upper one the decoration is by opaque images and incised lines; in the lower one, it is by reserved lines.[2] At length it occurred that the Ionian ceramist employed together on the same piece all the procedures, examples of which he found on the very varied types brought under his eyes by the ever increasing activity of commerce. T This is the case for a plate from Naucratis.

Note 1.p.446. Böhlau. Aus ionischen,etc.p.86-87.

Note 2.p.446. C. Smith. Early paintings of Asia Minor. p.185-187. Fig. 3. (Jour. Hell. Stud. 1885. Furtwängler. Jahrb. d. deut. Inst. 1886. p. 139, no. 2939. Pottier has published a c cratera of the Louvre on which the decoration shows the same mixture of the two procedures (Cratere grec de style Corinthien et Rhodien. Monuments Piot. Vol. I, p. 43-46, Pl. IV), but that vase was discovered in Italy. Pottier believes it to be of Corinthian fabrication; Furtwängler regards it rather as t the issue of an Ionian workshop.

"This plate bears on the inside the figure of a sphynx with body in opaque black, with head and paws in black outline on the ground of the white covering. The masses of hair, the scales on the chest and some small muscular details of the paws are incised; others are reserved. Finally the eggs of the circumference and certain lines of the wing are detached in white. Four or five technics represent the attempts accumulated during several centuries. (Black image, black line on light ground, white line on black ground, reserved lines, incised lines. This sort of incoherence and complication shows that it was time to adopt a single and simple method."[3] The Corinthians first and then the Athenians supplied it.

Note 3.p.446. Pottier. Catalogue. p.502-503. Some juxtaposition of white lines laid on black and incised lines on a dinos apode of the Louvre. (Pottier: B.C.H.189 . p.423-426).Fig. 1.

If the pleasure taken by the eye in Ionia by the contrasts and the harmonies of color, there led the painter to make only a feeble and late use of the incised line, on the other hand from the beginning, he counted much for the general effect of his decoration on those retouches of Vinous red, that combine equally well with the black figures and the yellow of the coating. These reds were not laid on the black, they filled spaces prepared to receive them. This is a variant of the method of reserved lines.

If one passes from the study of the procedures of execution and of coloring to that of the choice and distribution of the motives, this is the impression made at first; this ceramics, particularly that of the Rhodian oenochoes and of the great p plates that accompany them doubtless offers much not yet seen by one on first leaving a museum hall, filled by the pottery of Cnossos and of Mycenae; but still there are between it and the Cretan or Mycenaean ceramisc, resemblances that cannot be the effect of a simple accident. By the role that the ancient and traditional elements play in this decoration, one divines that there was there a transmission of certain forms, and a direct affiliation of one art to the other, but one that left sufficient liberty to the mind of the artist, so that he could make a large part of invention and progress. In the pottery of Rhodes, Naucratis and Daphnae, as in the pottery termed Mycenaean, the human figure only appears exceptionally. On the superposed zones of ewers, on the tops of plates and on the sides of amphoras, are rarely seen more than figures of quadrupeds and birds. It seems that this may be given there as an assembage of all the favorites of the Mycenaean artist. There is the lion, the stag and deer, the ibexes with long recurved horns. All these domestic animals and wild beasts are those that the sculptor of the Achaian age has represented under the most vavied aspects on his ivories and intaglios. There is especially the ducks, swans and wild birds, which must then feed on the vast marshes and in the estuaries of the rivers. These web-footed birds here have the same poses as in these first attempts in ceramic painting; their bodies have the same curvature and a

very simplified contour, but where the general character of t the form is seized with much accuracy.¹ Yet one difference is to be mentioned. One does not find again here that flora and marine fauna, which give to the work of the Mycenaean decorator and notably to that of the ceramist such a singular appearance.[1] No alges attached to the rock and curved by the waves.[2] No cephalopod mollusks extending in all directions the membranes, which serve them as nippers, fins and sails. Nowhere is the octopus, cuttlefish or the nautilus.[3] In the paintings of Ionian vases is no more than the fish to represent all the inhabitants of the sea. On a plate from Camiros is thought to be recognized the swordfish (Fig. 213).[4]

Note 1.p.447. Histoire de l'Art. Vol. VI. Figs,4+4,489,491,498.
Note 1.p.448. The same. P.922-934.
Note 2.p.448. The saem. Figs. 436, 485-487.
Note 3.p.448. The same. Figs.43-, 4/3, 484-489,491-492.
Note 4.p.448. Longperier. Musee Napoleon III. Text and Pl. 53.

Ionian art then no longer has the same predilection as its predecessor for the lower forms of animal life, for those submarine landscapes which recall those presented by our aquariums. Between the time when flourished Achaian civilization and the time when that of Ionia took such a bold flight, certain images had passed out of fashion; but if by a natural evolution of his taste, the artist had come to concentrate his effort on the study and imitation of more noble forms, then were those of cryptograms and mollusks, he no less faithfully retained an entire part of the legacy if his predecessor. He loved to distribute on the field between the figures ornaments of smaller dimensions, some derived by systematic adaptation from plant forms, most borrowed from those combinations of lines which pleased the geometric style. As an example of those survivals, it will suffice to cite the garlands of leaves that extend on the body or are scrolled around the attachments of the handles, as well as the palmatium in the form of a straight racket or fern, the rosettes of all sorts, and the stars recall more or less nearly the flowers, roses, radiates or cruciferous, that suggested the first idea of them. In the order of purely linear arrangements, the crockets with hooks, cut triangles or w with opposed vertices, lozenges, concentric circles, more or less complex spirals, frets, fylfots, a heart shaped ornament

of two opposed volutes, which at Mycenae are found both in mural paintings and on many objects of gold and ivory,[5] finally imbrication that imitates the regular arrangement of scales, which cover the bodies of fishes or of reptiles.

Note 5.p.448. Histoire de l'Art. Vol. VI. Figs. 222-22.

Certain of these last motives are also found in the repertory of the ornamentists of the entermediate period, of that which we have defined by the rigor with which was imposed on the graver and the brush, in all eastern Europe during two or three centusies, a style that appeared so strongly to please itself by the play of points and straight and curved lines, that it forgot the world of life. Yet a distinction is to be made. On Mycenaean vases, these linear motives are far from having the same importance as on works of all kinds resulting from the so-called geometric style. At Rhodes as at Mycenae, instead of parading as masters and occupying the entire space, they served only to fill the voids. While on the sides of the vases of the Dipylon their innate stiffness affects even the living forms that appear in those paintings, here the contrary effect is produced. In Ionian as in Mycenaean ceramics is a certain motive, in which an eye not warned could see at the first look only a variation made or an abstract theme, when a more attentive observation divines there a generating principle of the image, an organic type, the mollusk, the flower or green branch, but the branch, the flower and the mollusk simplified, arranged and made regular by the hand of the ornamentist.

It is not alone in the series of these secondary ornaments, for filling, that is perceived the bond that connects Ionian ceramics to all the art of the Achaian age. In the figures themselves, there are significant details which attest the use of a model that one is compelled to follow even in its peculiarities. For example, this is the case for the sphynx. From t the 12 th or the 11 th centuries B.C., the coastal tribes of the Egean sea had already borrowed this factitious type from the oriental world; but in taking it for themselves, they had modified it. In the face that they had feminized, they had suppressed the chin beard, which with the uraeus placed on the brow gave to this composite form among the Egyptians the character of an image of the king.[1] On the other hand, they had a added there a pair of wings to the flanks, wings raised like

fans above the back. Here is further a trait by which the sphynx of ivories, jewels and of the Mycenaean vases is distinguished from the Egyptian original as well as from its chaldean, Assyrian and Phoenician derivatives; it has on its head a sort of cap or very low tiara, surmounted by a long and thin streamer, detached to float behind.[1] Now there is nothing in the primary conception of the sphynx to explain this odd coiffure, in which can only be seen an invention of the Mycenaean decorator. This arrangement survived the art which made it the fashion. When the European Greek ceramist and the goldsmith attempted to introduce again the sphynx in their decoration, it showed itself as thus adorned.[2]

Note 1.p.449. Histoire de l'Art. Vol. I. p.731-732.

Note 2.p.449. The winged sphynx is very rare in Egypt. When found there, the very long wings cover the rear part of the body of the animal and hang behind it.(Houtoire de l'Art. Vol. III, p. 129, Fig. 74).

Note 1.p.450. Histoire de l'Art.Vol. VI.p.833-834,Figs.416, 417, 418.

Note 2.p.450. The same. Vol. VII, p. 222, 248; Fig. 96.

It was the same in Asian Greece, when the same renaissance movement was produced there sooner and with more splendor, than on the western shores of the Egean sea.[3] Naturalized in Greecs during several centuries, the sphynx in advance by its marked place in the repertory nf the Ionian ceramist; it reappeared in his works with the mark by which it had endowed the art of Achaian Greece. It is found covered in that fashion on some vases of Naucratis, that have a very frankly archaic character (Fig. 226).[4] Men further did not delay to feel that this ornament had not a very happy effect and renounced it there. The head of the sphynx is only ornamented by long hair that e encloses the face, and falls in a thick mass on the nape.(Fig. 212).

Note 3.p.450.If we do not bring into line the fragment published by Schliemann, Ilios, Fig. 1567, this is because it seems to us to come rather from a Mycenaean than an Ionian vase. No white coating in the clay; the painting is black on a red ground. The sphynx does not have the appearance of those of Rhodian vases.

Note 4.p.450. Also see Naucratis; Part II, Pl. VII, Fig. 2,

and an amphora found at Caere, but certainly of Ionian make in Inst. Arch. Röm. Mitt. 1887. Pl. VIII. E. Gardner attests that among the fragments of Naucratic pottery possessed by the British Museum, there are several on which the sphynx presents this trait. (Jour. Hell. Studies. 1887 p. 121).

The Ionian ceramic painter then has not failed to profit by the Mycenaean tradition to form a repertory for himself, and which still existed when he set himself to work; but at that time other models presented themselves to him, that contributed in larger measure to the formation of his taste and his style. Those models were furnished to him by the arts of the ancient civilizations of the Orient, Egyptian and Phoenician, A Assyrian and Lydian. At Miletus, Ephesus and Smyrna, in all t the cities where caravans and merchant ships came in rivalry to throw in the bazaars all of the finesh that was produced by foreign industries, the native artisan was inspired by the themes and forms that these exotic works offered to his intelligent curiosity.[1] In attempting to imitate those that he saw, he felt his imagination aroused. To assure one's self that this was so, it suffices to glance at the Rhodian vases. We recognize everywhere their motives rendered familiar to us by the turnings of the long route by which we reach Greece from the banks of the Nile to those of the Euphrates and the Tigris, t then across the plateaus of western Asia.

Note 1.p.451. To properly comprehend what a large part must be given, in the relations of the oriental civilizations and in the influence that was exerted on the Ionians, to the overland commerce, which by the intermediary of the Cappadocians, Phrygians and Lydians placed the coastal peoples of the Egean sea in connection with Mesopotamia, one would do well to read a little book very rich in facts skilfully summarized and ideas presented in interesting fashion, which has the title: Ionia and the East, six lectures before the University of London by D. Hogarth (1908). The entire 4 th chapter is devoted to t the study of the routes by which occurred these exchanges between peoples separated by such a vast extent of lands.

Everywhere is the lotus with its large expanded flowers and its closed buds.(Fig. 189, 203, 209, 212). There is the palmatium, whose first idea was suggested by the fern-like leaf of various species of palm, and that in Phoenicia and Assyria lent

itself to such varied arrangements (Figs. 189, 216, 218). There are the cuneiform characters of Assyrian writing that the painter has employed to fill the borders, in the same fashion that in our medieval churches, the artists of the West utilized the characters of Arab writing, those called the Cufic characters (Figs. 205, 218). As a girdle of the necks of vases is the plait with a point in each bend, of which the Assyrian ornamentist made very frequent use for dividing or enclosing his pictures (Figs. 213, 224).[1]

Note 1.p.452. Histoire de l'Art. Vol. III, Pls.XIII, XIV, Fig.89

The impression is the same for the figures of animals. The lion often appears in this painting, either isolated (Figs. 201, 211), or associated with other wild beasts (Figs. 193, 197). Now at that epoch, if the lion perhaps still existed in the higher and less peopled parts of the plateaus of Asia Minor, he no longer ravaged the plains of Ionia. The image of him then given in Greece by the chisel and the brurh, even where most successful as on the fragment from Naucratis, always retains a conventional character that betrays its origin; sculptors and painters repeat it to satiety just as shown to them by the art works that came from countries like Egypt and Assyria, where the artist daily had opportunity to study from life the s shapes and movements of the great carnivora. Same observation for the spotted panther, sometimes substituted for the lion in these paintings. As for the other animals whose files fill the bands of aiguieres and amphoras, deer and stags, goats, ibexes and wild goats, bulls and rams, we have already found them with the same attitude of slow and processional march in the reliefs of Egyptian tombs,[2] on Assyrian vases,[3] on those metla cups t that Phoenician goldsmiths retailed and distributed over all the coasts of the Mediterranean.[4] With these inhabitants of t the thickets of the mountain and of the pastures of the plain are mixed in some places hybrid beings like the siren, griffin and sphynx. Now these are all children of the imagination of oriental artists. Phoenician imagery had long since spread and made common the types; but there is reason to recognize the d direct imitation of Egypt in the odd combinations of forms, w where an animal's head is placed on a human body, as on that amphora of Camiros, where is seen a man with a hare's head in the attitude of running.(Fig. 216).[1]

Note 2.p.452. Histoire de l'Art. Vol. I, Figs.22,29,456.

Note 3.p.4-2. The same. Vol.II, Figs. 377, 378.

Note 4.p.452. The same. Vol. II.figs.407; III, Figs.543,552.

Note 1.p.453. The same. Vol.I. p. 59-61.

The Greek painter has added not much to this series of exotic monsters. Scarcely the honor of more than a single original creation can be given to him, that of the Chimera. The head of the goat rises above the back of the lion, that has a serpent as a tail (Fig. 213).

The mouth of the lion and the head of the serpent emit flames. These different forms ahere are much less well joined together than in the sphynx and griffin; they have not produced the illusion of a living entirety.

Among all the products of the industries of the Orient that converged to the markets of Ionia were none, in which the Greek artisan could not distinguish some motive by which he could not make his profit; but especially in the tapestries decorated by the play of the shuttle or by the needle nf the embroidress and in the ornamented metal cups, that the Ionian ceramist found the principle of the system of ornamentation, that he applied to his vases. This principle is that of the division of the field into a certain number of zones enclosing a central medallion. By their great length and small width, these bands lend themselves better to the development of a procession than to the representation of a single scene. The central motive on the contrary, could be composed of a single figure or comprise several engaged in a common action. From the tapestries and t the metal cups, the potter of Rhodes took for his aiguires the different bands of their enclosure and superposed them above each other. For his plates, he borrowed from there these same models the medallion with its round form and with the importance attributed to the image that filled its field. As for the narrow bands in the works of the Phoenician goldsmith, that surrounded the principal subject, this corresponds on the plates of R Rhodes and of Naucratis to the concentric circles that serve as a border. In the widest of these circles, the design is sometimes purely ornamental; it only admits purely geometric motives, between which are inserted palmatiums and heads of a animals(Fig. 215); but elsewhere are seen repeated the pursuing their uninterrupted march, the wild beasts and monsters th

that seem to have a right to this place.(Fig. 192).

Particularly on the plates of Naucratis and of Rhodes, one likewise appreciates and measures the importance of the borrowings, that the first Ionian potters made from their oriental models. The imitator is there taken in the act. A happy chance has preserved a sufficient number of examples of Phoenician m metal cups by which these potters were inspired. If these clay be placed opposite the Syrian cups of silver and bronze, one can judge of the spirit in which the copyist used the model; one takes account of what intelligence and personal initiative he put into the part which he derived from it; but the case is not the same for other products of Asian industry, from whose decoration our ceramist has perhaps drawn still more largely, than from works of jewelry. We speak of those tapestries and embroidered fabrics that the workmen and workwomen of Chaldea and of Syria exported to the markets of the coasts, where those masterpieces of the shuttle and needle were much sought by those Ionians, who have been described to us by their poets as so charmed by the luxury of furniture and of dress. Of those rich tissues in which noble Ionians draped themselves with long folds and decorated their dwellings, not a shred has remained to us; but for the appearance that they presented, the character of the arrangement of the motives that formed their d decoration, one can form an idea by the copies that sculpture has left to us and by some texts of the authors. Of these tunics and mantles charged with embroideries, we have their faithful images in the fine carvings of Assyrian reliefs, in the m minute rendering of the costume assigned to the king and his great officers.[1] There are found arrangements analogous to those of the cups. In the middle of the piece of fabric, in a c circular or oval medallion is the king in adoration before the sacred tree, with gods and genii. All around in the borders t that enclose that medallion are processions of winged personages, combats and files of real or factitious animals; then beside are chevrons, cones and plaits, plant ornaments, such as rosettes, sheaves or garlands of flowers and buds, fruits resembling pomegranates.

Note 1.p.454. Histoire de l'Art. Vol. II, Figs. 305,443-449.

Those were the current motives that traditions frequently s secular placed in a way at the fingers' ends of all art workers

employed in working or ornamenting fabrics or wood, ivory or metal, from the valley of the Euphrates to that of the Nile, from the slopes of Lebanon to those of Taurus. From one to another of the States that divided among themselves that vast extent of lands, these motives varied only within very narrow l limits. What could and must differ from one country to another were the effigies of the deities, the groups of a symbolical character, the types that expressed the special religious conceptions of a certain people; but whatever this was in Egypt, Assyria or Lydia, these divine images and these symbols had nearly the same enclosure of ornaments everywhere. As for the Phoenician artisan, he inserted in his skilful imitations all these figures of the gods and of genii, all these groups with a mystical sense, without caring longer for their signification; he attributed to them no value other than that of ornamental elements.

All these peoples of western Africa that were elder than the Greeks then had the same grammar of ornament, if one can so s speak. Elaborated by the combined efforts of collaborators not all of the same race and by the successive labors of many generations, this grammar had grouped and classified the terms of this language of forms. It had stated and defined the inflexions of the words of this common language. This grammar also had its syntax. By plactice it had regulated the relations that such varied forms must sustain between them. To each of these forms it had assigned the place best suited to it in the entirety of the decoration, the place in which it assumed all its value of expression. Established in Asia Minor, the Ionians w were first of all Greeks to enter into constant relations with the heirs of the lod civilizations of the Orient, to be affected by their prestige and to draw from the treasure of forms c created by them. These forms that they borrowed thus to adapt them to the expression of their own ideas, they did not take separately, isolated and detached from the context. They borrowed them as the model offered them, together with those that accompanied them in the model. In inserting them in their own works, they were very naturally led to assign them a portion correspondiug to that occupied by these motives in the originals that inspired them, see how on the Rhodian plates we find

again the arrangements of the Phoenician cups, and on the oenochoes those of Chaldean and Syrian tapestries.

The ceramist must have found still more to take from those exotic fabrics than from the cups chased by the goldsmith. Those were articles of value, concealed by the rich in their houses with the jewels of their women. On the contrary, Babylonian tapestries were exposed to the eyes of passers, they served as portieres before the doors of noble dwellings. On the agora and in the festivals of the city were seen men and women decorated in fabrics ornamented by the needles of those Phrygians, to whom Pliny attributes the invention of the art of embroidery.[1]

The idea of these fabrics given by the texts corresponds in every part to that which could be formed from the Assyrian reliefs. Herodotus describes a cuirass of linen, that of the king of Egypt, Amasis, presented to the Lacedemonians."On the fabric were incorporated many figures of animals.[2]" The gift was intercepted by the Samians. Hence this cuirass was found at S Samos, but the historian adds:- "Another entirely similar,was offered by Amasis to the Lindian Athena," in the island of Rhodes. The potters whose works were found at Cnidos could admire it at Rhodes, and there see detached on the whiteness of t the linen those lines of birds and ibexes, which they transferred to the sides of their jars. Likewise Philostratus in describing a real or fictitious painting, that represented Themistocles exiled and speaking before the king of Persia, boasted of the art with which the painter had represented in all its splendor the historical truth, the costume of the monarch. Philostratus did not fail to note that the artist, curious in the local color, had placed on the royal robe"the fantastic animals of all sorts, that the barbarians embroidered on their fabrics."[3]

Note 1.p.456. Pliny. H.N. VIII, 74.

Note 2.p.456. Herodotus. III, 47.

Note 3.p.456. Philostratus. Imagines. II, 31.

Philostratus and the paintings that he describes are later than the vases of Camiros by several centuries; but it is known with what obstinate persistence the industries of a domestic and familiar character, are attached to repeating the same mo-

motives almost without change for centuries. This will always be the case for the embroidery and lacemaking. They from infancy learnfrom their mothers to execute the designs that their mother had learned from her own, a docile heiress of the practice of the grandmother. It was the same for the weaver until the day, when in the West the introduction of machines profoundly modified the course of that industry; but it is doubtful that even today the effects of this revolution make themselves felt in the Orient. Until yesterday the present was always tinged by the past in this domain of industries that concern art, allowing everywhere to arise and reappear like the flower from the ground, the habits and forms created by the past. On the rugs still made at Ispahan is believed to be found abridged a and modified a motive borrowed from the type of the capital of persepolis, that with the two busts of bulls back to back.[1] W What is certain is that on the beautiful carpets woven in Persia for Shah Abbas in the 17 th century, there are readily found in the borders, motives shown in the same place on the hangings intended to furnish the palace of Assurbanipal or of Croesus, the combat of the lion and the bull, hinds and birds, enclosed by scrolls of leaves and flowers. The difference is, that on the arid plains of Iran, the pheasants of the forests of the Elburz mountains have replaced on these borders the ducks, geese and swans placed there by the borderers of the Euphrates and those of the rivers with marshy outlets flowing into the Mediterranean.[2]

Note 1.p.457.Histoire de l'Art. Vol. V, p. 867, Fig. 521.

Note 2.p.457.Gustav Mendel. L'exposition des arts musulmanes a Munich.(Revue de l'art ancien et moderne. Vol. 28. 1910. p. 253-268).

Pupils and imitators of oriental artisans, Greek,weavers and embroiderers, even after they had begun to represent on their fabrics of luxury scenes drawn from Hellenic myths, still enclosed within borders borrowed from exotic tapestries, and did not lose sight of the origin of the images that filled those bands. Thus is seen by the description, that the author of a compilation placed under the name of Aristotle gives of the himation that Alkimanes of Sybaris consecrated in the temple of the Lacinian Hera, where it caused the admiration of pilgrims. In the middle of the great fabric, the weaver had placed

the effigies of six principal deities of Greece. On one side, he had represented Alkimenes the giver, and on the other was the city of Sybaris; but it is difficult to determine from the text as printed, what the workmen placed at the top and bottom in the border. If there be accepted an ingenious interpretation recently proposed, there were lilies on one part, i.e., lotuses, on the other being persons in oriental costumes.[1]

Note 1.p.458. (Greek). Longperier proposes to translate this, and his translation has been frequently reproduced:- "The top represented the sacred animals of the Susians, and the lower those of the Persians;" but for this translation to be acceptable, it is necessary for the text to give Sousianois and Pessikois. Sousios cannot be an adjective. Dugas proposes to remove the capital and to see sousois the Greek transcription of a Semitic word signifying lily. With this sense, the word souson is so found in no Greek author; but its derivative sousinos is used in the neuter (to sousinon) to designate in scientific language linseed oil, and a text of Atheneus proves that the Semitic word in the Grecized form souson was not unknown to the Greeks; but it was only current in the technical language of weavers and embroiderers, which would explain why no literary text has preserved it to us. It is further not seen from what author the pseudo Aristotle borrowed his description, based to establish a distinction between the sacred animals of the Susians and those of the Persians. The correction proposed by Dugas, if that can be termed a correction, seems to us to offer a high degree of probability.(Dugas on the himation of Alkimenes of Sybaris (Bull. Hell. Corr. 1910.p.116-121).

If among the Greeks, the decorator of fabrics did not think of freeing himself from this imitation, even to fill the spacious fields at his disposal, he had the brilliant and varied t themes supplied to him by the fictions of the national poetry, why was not the ceramist with resources much more limited, impressed to profit by the models that lend themselves to an almost literal transcription? If he carried into the execution of the figures the qualities of designer personal to him, besides the motives themselves of his ornamentation, he takes from the foreign workman which that workman adopted for the arrangement of those motives. The long bands that extend from one border to the other of the piece of linen, all flowery with the

lotus or peopled by animals, he transferred to the sides of h his jar and superpoesed them in stories.

Particularly from metal cups, the plates of Camiros borrowed the plan and sometimes even certain motives of their ornamentation. In a silver cup found in Etruria, but which is certainly of Phoenician fabrication, the central medallion represents a cow suckling her calf; this is a theme that the Syriar goldsmith borrowed from Egypt, as one is informed by the presence of the supple lotus stems, that form the ground on which is p profiled the image of an animal.[1] Now in the same place on a plate of Camiros, the painter has placed a bull; aroused by a sudden noise, he raises his tail and turns his head to look backward. The movement is the same as that of the cow and is natural (Fig. 214). The similarity is sometimes carried farther still. On the wide border of a pinax of Camiros and between symmetrical groups of nails, three busts of swans alternate w with ample rosettes (Fig. 215). Now that we have already seen those long necks and fine beaks of birds rise around a silver patera.[2]

Note 1.p.459. Histoire de l'Art. Vol. III, Fig. 553.

Note 2.p.459. The same. Vol. III. Fig. 554.

The arrangement on the patera is not entirely the same as on the plate from Camiros. The swans and heads are turned toward the centre and not the periphery of the disk; they are grouped in pairs, back to back; but with these differences, this is t the same motive in both employed for the same purpose.

By these comparisons it is seen that it is not one of the g great nations of the old Orient, that has furnished its contingent to the repertory, which the Ionian artist aspired to create for himself; but of all those civilizations, that which m must make on the mind of that artist the most profound impression, was the civilization of Egypt. What the Ionians received from Egypt came to them only by the intermediary of the interposed peoples. The sole direct transfer that their artists appear to have made from the equipment of Chaldeo-Assyrian civilization is that of nails, quite similar to those forming the element composing the cuneiform writing, which they have used for filling the voids in the borders of their plates (Fig. 215). In the 7 th and 6 th centuries B.C., the princes of Nineveh a and those of Babylon had with the kings of Lydia, Gyges and

Croesus, relations sufficiently continuous that documents written in cuneiform characters could have reached even the Ionian coast. It is also possible that legends written in those letters may have appeared on Chaldean tapestries or on other objects of luxury, which had reached the markets of Ephesus and of Miletus. As for the Phoenicians, relations between them and t the Asian Greeks were frequent and direct; but they were only business relations. They met on the quays and ports and in the galleries of bazaars in which the two navies and the two industries disputed with each other the patronage; but they neither like nor impressed each other. Between the two races was a mistrust and a jealousy that frequently resulted in acts of hostility. Egypt inspired the Ionians with quite different sentiments, when in the first half of the 7 th century it opened for them, so that as mercenary soldiers and curious visitors then even passed to the first cataract, and established themselves in the Delta as merchants, courtiers and artisans. They were dazzled by the sights that Egypt presented to them; they admeired with an ingenuous confidence into which entered some naivety. That their architecture and sculpture must have owed to the grand appearance of the Egyptian edifices, to the splendor of their ornamentation and the secrets of the trade, which Greek artists could steal from the workshops of Sais and of Memphis, we have elsewhere stated.[1] If there were in Egypt something that could not fail to strike at first sight the eyes of the traveler, this was the rich decoration of the tombs and t temples. To all that handled the brush, it gave a very suggestive example. It is difficult to admit that the painter of Ionian frescos remained insensible to that magic of color, and what induced him to think that he had been seduced by it, was the very marked pleasure that his humble pupil, the ceramic p painter seemed to take in the vivacity of the tones and their variety.

Note 1.p.460. Histoire de l'Art. Vol. VII, p.371-372, 654, 656, 661; VIII, p. 704-719.

Here is another character of this ceramics, in which we are also inclined to see the effect of the study of Egyptian models; this is the part that the decorator there draws from the plant kingdom and the spirit in which he treats the motives, that he borrows from it. It is known how important is the role that t

the plant plays in the entire ornamentation of Egyptian art.

Considered with love, rendered with intelligent fidelity, the plant appears everywhere in the most diverse creations of this sculpture, in ascending bundles of bouqets, on the capitals of shafts of columns,[2] under the appearance of deep thickets in hunting and fishing scenes, that are frequently represented on the walls of tombs, [3] in flexible sheaves in scenes of offerings to the deity,[4] stuck in the hair or held in the hands of mortals and of goddesses,[1] as ornaments of the prows of boats, of furniture like wooden spoons, plates of glazed faience.[2]

Note 2.p.460.Histoire de l'Art. Vol. I. Chap. VI, sect.5.

Note 3.p.460. The same. Vol. I, Figs. 8, 26, 539.

Note 4.p.460. The same. Pl. III, Figs. 176, 187, 257.

Note 1.p.461. The same. Pl. III, Figs.164,194,480,514,524.

Note 2.p.461. The same. Figs. 159, 551, 585, 586.

Particularly at the school of those masters the Ionian painter, already disposed to seize these lessons b: what he had retained of Mycenaean traditions, learned to interpret the leaf, flower and fruit with a very free ease and an intelligent fidelity. He borrowed from Egypt the garlands that he loved to p place around the necks or feet of his vases, those where the buds of the lotus alternate with its expanded flowers. It is true that this motive has been very frequently employed in other ceramics; but let one place beside a Rhodian oenochoe some amphora of Corinth or of Athens, on which is also found this ornament, that he will be struct by the difference. He will feel that the ceramist of Rhodes or of Samos was nearer than his rivals to the plant, whose memory is evoked by this continuous series of influences. Doubtless he has not himself seen the lotus spot with white, blue and rose the surface of its n native waters; but between him and the artist to whom it was given to admire it in place, there is no intermediary. This d direct vision of it, he has had as a first reflection. In those of his works on which the brush has scattered the flowers of the lotus, this rises with a supple and bold movement separately on the sides of the vase, just as in the canals of the Delta, borne on long stems inclined by the force of the current, they rise from the bottom to expand on the liquid sheet.[3] Entirely otherwise is the appearance presented where this motive

was borrowed by the workshops of European Greece from the decorators of Asian Greece. Because of those passing from hand to hand, it is not a manner congealed in the vulgarity of a routine practice. It then has in the drawing of the flowers and b buds of the lotus, all rising straight in the field, a monotonous regularity that is again accented by the very clear incised lines (Fig. 227).

Note 3.p.461. See Naucratis. I. Pl. VII, 1,7,8,9, for Daphnae, Tanis II, pl. 26.

It is not only in the rendering of these garlands that the Italian painter shows the pleasure, that he takes in introducing the plant ain his decoration without causing it to lose t the appearance that it has in nature. On the body of an amphora from Camiros, above a bird of the order of Grallae, two flowers in bell form face each other, attached to a wavy stem t that seems to bend under this light load (Fig. 228).[1] They are of the family of the pretty blue campanulas, that he formerly saw springing there in thousands from the clefts of the rock on Lycabettus or on Acrocorinth. On the other side of the same vases a bell shaped flower occupies the middle of the field. at right and left, are two bouquets in which we seem to recognize the slender and divergent petals of the honeysuckle flower as well as the elegant curves of the tendrils that aid this shrub to attach itself to the bushes that it clasps (Fig. 218).[2] It is well known how the brush of Italian ceramic painters was pleased about the 14 th century by scattering everywhere on i its pottery the ornament derived from that plant form, but as said today, while conventionalizing it yet more. Elsewhere is a chaplet of pomegranates that surrounds the shoulder of the vase. (Fig. 220).

Note 1.p.462. Likewise at Daphnae. (Tanis. Pl.31. 10).

Note 2.p.462. Same motive on several fragments from Naucratis. (Naucratis. I. Pl. VI,3, XIII,2,5 XII; pl. VII, 5,.

In the representations of animals is found, in spite of what the general data has of the conventional, is this same love of the true. Doubtless on the Rhodian oenochoes, the drawing has in places something stiff and angular, that denotes also a certain inexperience; the bodies of quadrupeds are too thin; but the movement is singularly accurate. Swans and ducks indeed h have there the slow and grave step, which their great palmatic

feet cause; by the elongation of their necks and the thrust of their beaks is divined the avidity with which they search the vase to seek their food. These birds, waders and palmates, the inhabitants of the Ionian coast have always under their eyes. They see them light and rise in flocks, hover and feed in the marshes in which the Cayster, Hermos and Meander cast themselves into the sea. This spectacle struch the epic poet, to whom it suggested a comparison that Virgil expressed. It could not escape the attentive eyes of the painter who walked on those shores.[3]

Note 3.p.462. Homer. Iliad. II, 459-461. Virgil. Georgics.I. 382-386.

Deer and ibexes are no less happily seized in the pose in which with head bent forward, they crop the grass of the meadow. (Figs. 189, 192, 19 , 200, 205, 212). Dogs running on a cup of Naucratis have a fine dash (Fig. 192). Factitious animals like the sphynx and griffin, that mix in these files are not out of place there in the midst of types that the painter has borrowed from the real world; they almost blend with them, due to their natural poses. There are not found those binary and symmetrical groups, two wild beasts fighting with each other, or a wild beast struggling against a monster, two monsters in combat, a man assailed by a lion, that continually return in the decoration of Corinthian pottery and give it a sort of realized vulgarity. Even in caprice, one is here nearer truth to life.

The ceramics with white coating from Camiros and the Ionian agencies of Egypt is yet at the time when from the painter is required only images, that without presenting a definite meaning, amuse the eye of the spectators. The human figure is almost absent from its decoration. At least in what remains to us of its work, we find but very few vases on which is placed one of those scenes taken from the national myths, that will soon furnish to ceramists their favorite themes. We have at Rhodes the pinax of Camiros on which is represented the duel of Menelaus and Hector, who dispute the corpse of Euphorbos, and that of Perseus fleeing before the Gorgons. (Figs. 221, 222). Elsewhere on fragments found at Clazomenes is thought to be recognized two episodes of the Iliad, the flight of Troilus before Achilles and Achilles dragging behind his chariot the corpse

of Hector (Figs. 197, 198). At Kyme are satyrs dancing around a cratera, men fleeing before lions (Fig. 199). There is at Myrina the bust of a man among geometric ornaments (Fig. 0.). There is on a vase of unknown origin but believed to be Rhodian, a prpresentation of the comos (Fig. 219). At Naucratis [1] is a goddess mounting on her chariot (Fig. 191), and hossemen armed with spears that they throw at each other.

Note 1.p.463. Jour. Hell. Studies. 1905. Pl. V.

There are also from Naucratis some images of negroes (Fig. 195). Heads of them have a grotesque appearance certainly not desired by the painter; it comes from the effort that he, more sincere than skilful, has thought must be imposed on him to v very frankly accent the particular character of the traits that distinguish that variety of the species. For the warriors of the Rhodian pinax, the face is concealed by the visor, nosepiece, the sides and chinpiece of the helmet; only the eye is uncovered. On the other hand, the body entirely presents itself to view, engaged in a violent movement. Taking the entirety of the pose, that is well seized; but the drawing remains soft and without accent. Of the torso nothing appears, being enveloped by the cuirass and tunic that it covers. As for the shoulders and arms, the thighs and knees which are nude, the brush has not even attempted to indicate the projection of the muscles and the play of the joints. The members are almost thin; one does not feel manifested there the exceptional strength, that the poet of the Iliad gives to his heros. As of conscious of this defect and to give value to his figures, the artist h has given them very slender proportions; but this expedient badly conceals what he lacks in experience. These are his beginnings in the drawing of the male form. He has still but a very summary idea of this form. One should note in this sort of sketch a peculiarity that merits attention; this is the method taken by the painter in drawing the eye. On the head of the negro as on those of Hector, Menelaus and Euphorbos, this is represented by an oval, at the middle of which a black round marks the place of the iris. We find this oval more or less elongated in the paintings of all vases, that it is believed right to attribute to Ionian workshops, whatever the sex of the person. Now it is not the same on the Corinthian and Chalcidian vases nor on Attic vases of the ancient style. Everywhere

there it is only in the faces of women that the eye has this oval form; on men's heads it is represented by an incised circle or by two little concentric circles with a line or little triangle attached at each side (Fig. 229). The Ionian art never cared to make a difference there, no more than it appeared to have found pleasure in another refinement of the same kind, perhaps a little more arbitrary, it has never sought to distinguish the sexes as done elsewhere by reserving black for male flesh, while white was used for the flesh of women. If in the workshops of Ionia men were not informed of these conventions, this is perhaps that they were diverted from them by a secret instinct, by this feeling for nature and taste for truth, which to us appears appears to manifest itself in the rendering of the flower anf that of the animal.

A last trait is to be mentioned in this first Ionian ceramics; we have found there nowhere on vases the inscriptions found in such great numbers in the other Greek ceramics. Not one signature of a potter or a painter. A single example of the inscriptions that give the names of the actors in the scene represented, the legends on a Rhodian plate on which is represented t the combat of Hector and Menelaus (Fig. 222). This absence of explanatory legends is surprising. There was no need on vases which had no decoration other than files of animals and of monsters. The activity of these workshops also allowed a too limited place for subjects taken from myths and poetry, so that henceforth the habit was established of aiding the mind of the patron by the addition of those legends. The use of them will be imposed later, when the paintings of clay will have taken the character of a sort of current illustration of the national epic poetry.

To explain this absence of inscriptions, it will perhaps be proper to recall that many of these Ionian vases possibly date from the time when there was little written in Greece, although writing was already known there. In such a matter it is difficult to fix or even to indicate dates; but Asian Greece having always been in advance of European Greece, we should be quite disposed to carry back to the last years of the 8 th century the vases of the first Rhodian style, whose decoration is entirely borrowed from oriental models. These first products of Ionian workshops would be earlier by about a century than the

first works of Corinthian workshops. The Attic vases of the D Dipylon, that can claim the same intiquity as the most ancient Ionian vases, also have something slightly barbaric. The Ionian potters first gave the Greeks a ceramics that has an art character. However limited may be the means of expression at the disposal of the painter, this ceramics owes a certain beauty to the harmony of its vivid colorings, to the happy arrangement of the motives employed, and to the rather singular elegance of those motives.

6. Vases of the Cyclades.

All examples of Ionian ceramics so far studied have been collected either on the site of the agencies of Ionian merchants founded in the Delta of Egypt, on the coast of Isian Greece, among the ruins of the cities of Ionia or of cities, that by their origins adhered to the Eolian or Dorian sources, had been subjected more or less to the ascendant of Ionian genius; but we have further learned more of the tendencies and originality of those works by the material from the cemeteries of the island of Rhodes. Although the latter recognized Armos as its metropolis, there is revealed to us by the entire character of its art as well as by the place that it had taken in the amphictyon of Naucratis, as an annex of Ionia. To pursue that investigation farther, it remains to seek where and in what measure it made itself felt toward the West in the rest of the Hellenic world. We have followed the sculptors of Chios and of S Samos to Naxos, Paros and De,os, even to Athens, where they initiated the Attic workmen in working marble.[1] Is there not a chance that on the same routes, we should find the trace of I Ionian ceramists, of the style and taste of which they gave to the first models in their workshops on the coast of Asia and in the adjacent islands?

Note 1.p.466. Histoire de l'Art. Vol. VIII. Chap. X and p. 667-684.

In very remote times the Cyclades had an entirely primitive civilization, that by its origin was connected with that of H Hissarlik, the first establishment of Tiryns and the villages buried at Thera beneath pumice stone and ashes, while by the execution of those of its works appearing least ancient, it is joined to the Mycenaean civilization.[1] After the fall of that civilization, the potters of the Cyclades, docile survivors of

what was then done in European Greece, practised with much diligence the style called geometric. Fragments of vases of this style were found in great numbers at Delos; but it was especially the excavations at There, which have proved that the island potters carried as far as those of the continent the search for the happiest combinations, that this style could give, and which have led to such complicated arrangements.(Fig. 230).[2]

Note 1.p.467. Histoire de l'Art. Vol. VI, p. 170-172. To the relation of the excavations mentioned in note 2 on p. 180 add a later memoir full of curious facts. Tsoundas, Kykladika in Ephemeris. 1898. p. 137-212. Pls. VIII-XII.

Note 2.p.467. Thera. Unternehmungen, Vermessungen und Ausgrabungen in den Jahren 1895-1902. Vol. II. Theraeische Gräber. Chap. IV. Die archaischen Thongefässe von Thera.

The Ionians were stimulated by the multiple suggestions that came as if by effluvia from all the work of the old civilizations of the Orient, were the first to abandon the cold repetitions of the geometric style and to desire to reintroduce in art the image of life. Like the works of their statuaries and modelers, the vases of their potters must be distributed in t in the Cyclades and cause there the local workshops to have t the birth of a new style, and that which inspired the goldsmiths, the works of the papestries of the Orient; but the imitation was at first very awkward. One can imagine nothing more barbarous than the decoration of an amphora discovered at Thera (Fig. 231). These are the animals and monsters that we know by the vases of Rhodes; but here the contour is thick and heavy; the poses are formal and stiff.

It would be easy to find at Thera in the rich series of vases called orientalizing, several fragments which attest that the decorator, when inspired by these midels, has not always been so unskilful.[1] This is the case of a skyphos on which the brush has placed between frames filled by geometric motives, two birds that have the pose of a partridge (Fig. 232). But there is no place for delay to survey the series of these attempts. What is more interesting is to find in this group of islands, w works of potters prompt to follow the example that the Ionian ceramists give them when they extend their repertory, attack the human figure,and commence to seek the theme of their paintings in the myths of the national religion and in the tales of the

epic poets.

Note 1.p.468. Ducks and a very correct design decorate the amphora.(Dragendorff. Theraische Gräber. p. 211. Fig. 418.

The vases that attest this evolution in taste appear all to come from Melos; but while in that same island there has been explored in ditch after ditch, that old cemetery of Phylacopi, whose poor funerary equipment has permitted the forming of some idea of an entirely rudimentary civilization, we have no information on the tombs from which came the archaic Greek pottery. Yet there is no reason to call in question the accuracy of the indication furnished by Conze, when in 1862 he published the first vases of this type brought to the curiosity of archaeologists. 2

Note 2.p.468. A. Conze. Melische Thongefässe. 1862. The vases that Conze studied at Athens were not acquired from one of those dealers that have no interest in making known the site from which they obtained the objects that they sell. Two of these amphoras were found in the palace; they had doubtless b been sent to the king as gifts. The third was kept in the cabinet of Pittakis, conservator of antiquities, at the ministry of public instruction. He certified to Conze that the amphora was sent to him from Melos. For the two amphoras kept at the chateau and to which was attributed the same source, his statement was confirmed by M. Holzmann, an officer attached to the royal house. The English School of Athens also possesses an amphora entirely similar in form and decoration to the amphoras published by onze. Now this vase was purchased at Melos itself by M. C. Smith during the course of the excavations, that the members of the School made at Pylacopi. He was even shown the place where the fragments of it had been exhumed.(Jour. Hell. Studies. 1902. p.68).

These three vases and those compared to them since in attributing to them the same source are so similar to each other in all respects, that one would be tempted to believe that all c came from the same workshop. These are amphoras of a very peculiar form. The neck opens very high and the body is very wide. The handles are small, the foot is a truncated cone and has all the appearance of the support of a cratera (Fig. 233). Same resemblances in the execution of the decoration. After turning, the vases were plunged first in a bath of very fine clay of a

reddish brown dissolved in water. On the first glaze, the workman has spread with the brush a coating of pale yellow, on which he painted in black and red the ornaments and figures. In these the nudes of the flesh and many details of the muscles and clothing are indicated by the method of reserved lights, which allow the color of the ground to appear. The drawing of these figures has the same character everywhere, and all around them the field is encumbered by the same linear ornaments, posts, rosettes, triangles, lozenges, chevrons, particularly palmatiums and volutes. The painter aims to couple those volutes, to unite them in pairs or fours, and between the divergent branches of the motive so formed, he inserted palmatiums. To separate the bands, he employs the garland of lotus buds anf flowers.

We shall limit ourselwes to mentioning an amphora, whose decoration from top to bottom is composed of scrolls and palmatiums. At the middle of the body are placed a pair of horses facing each other.[1] On another amphora, the neck is divided by v vertical bands into several parts on which are superposed palmatiums faced by volutes, and where are developed scrolls of the kind of those liked by the Mycenaean ornamentatist (Fig. 233). Below is a band filled by lotus flowers turned alternately up and down, then the principal band that corresponds to the most convex part of the vase. There are seen on one side two horsemen, perhaps the Dioscures, each holding two horses by his hands. On the other side of the vase are two free horses. Below are scrolls with spirals, triangles with opposed bases, frets, chevrons and sawteeth.

Note 1.p.470. Conze. Melische Thongefässe. On title page).

On a third amphora, the figures take much greater importance. On the neck are two hoplites attacking each other with spears near a trophy of arms. On each side and beyond a vertical band, two women are present at the combat and make gestures of astonishment. Perhaps the painter desired to show there the duel of Achilles and Memnon, which had as witnesses their goddess mothers, Thetis and Eos (Fig. 234). On the principal side of the body and below a band occupied by a file of brown ducks, three persons stand on a chariot drawn by two winged horses (Fig. 235). In the first is recognized Apollo by the lyre with 7 strings that he holds before him. He has a short pointed beard. Greek art had not yet fixed the traits that it gave to the god of

music and poetry. Behind Apollo are two richly clothed women, the heads bound by the stephanos of goddesses, that can only be two muses. Before the chariot and turned toward it is Artemis, bow and quiver on her shoulder, an arrow in the left hand. With the right she seizes the stag by the horns; here ordinary companion. The horses of the chariot are drawn without any care for nature, entirely from the decorative point of view; but their contour is traced with a very firm hand; there is some nobility in the appearance of these chimerical coursers. The inexperience of the artist is even more apparent in the representation of the four deities. The noses are pointed and enormous as on the personages of the vases of the Dipylon. The eyes are placed obliquely and are flush with the line of the forehead. The chins recede. The necks are out of proportion and so are the feet of Artemis.

The painters of Melos seem to have had a marked predilection for this theme of winged horses drawing a chariot that bears deities. This theme is found on another vase acquired by the museum of Athens.[1] A young woman stands in the chariot (Fig. 236). Behind her is a person recognized as Hercules by the lion's skin cast on his shoulders and the club held in the hand. He has one foot on the ground and the other is already placed on the floor of the chariot. At right and left of that g group are a woman and an old man, both standing on the ground. The meaning of the image is given by the pose of Hercules and the gestures of the two secondary persons.

Note 1.p.472. (Greek).

There is anger in the attitude of Hercules. The hero seems to respond by a threat to the reproaches or prayers that the old man addresses to him with hands extended toward him. Same expression of sorrow and complaint in the extension of the arms of the woman standing before the chariot and against the rump of the horse. This signifies an abduction. Hercules carries off the young woman that his left arm holds. She alone appears tranquil. In her is felt the passive resignation of the Briseis of the epic poems, of the Termessa of the Attic drama. According to all appearance, this is Iole, daughter of the king of Oechalia between her father Eurytos and her mother Antiope, who vainly endeavor to affect and stop the ravisher.

On the neck of the amphora, above the scene of the abduction

[illegible]

ders (Fig. 257). One is a woman with tresses hanging on her b[illegible]
back. She is richly clad in a tunic ornamented by designs li[illegible]
[illegible]
body. Facing her is Hermes with belt encircled by a band, [illegible]
cognized by the wings attached to his heels. He is dressed in
[illegible]
[illegible]
ven to the woman opposite Hermes. It is perhaps his [illegible]
nor is there any reason to establish any connection betw[illegible]
this image and that of the body of the vase. Yet one can reca[illegible]
that in a number of paintings, Hermes figures near Hercules [illegible]
[illegible]
[illegible]

Art is here a little more advanced than on the vase of [illegible]
If the horses are also nearly as conventional, the faces in th[illegible]
figures of the men and women have an execution less awkward. [illegible]
the eye is better placed. The noses are smaller and the chins
are less receding. Progress is even more marked on a later v[illegible]
se of the same form and style.[1] On its body is no mythologica[illegible]
subject. On one side are two he-goats walking to the right, [illegible]
on the other is a sphinx, bearing on the head an ornament in
the form of a lotus, whose prototypes we have recalled.
A motive familiar to Ionian potters are the great eyes h[illegible]
painted below the handles. In the field is the same swarm of
accessories as on the other vases. In all that we find the pr-
ocesses of trade of the Melian ceramics; but there is on the
neck a woman's head, which from its regularity, and one migh[illegible]
almost say by the elegance of its profile, attests that the
painter already had under his eyes models in which the drawing
was finer (Fig. [illegible]).[2]

[illegible] 211-215, and Pl. III).

Note 2.p.[illegible]. A sixth amphora of the same type, purchased a[illegible]
Melos, belongs to the English School of Athens (Jour.Hell.St[illegible]
[illegible]
can be restored but partially. The composition of the decora-
tion seems to have been nearly the same as on the vase of M[illegible]
ules. On the neck stand two figures facing each other, [illegible]
[illegible]

of Iole are two persons within the space formed by two vertical bars (Fig. 237). One is a woman with tresses hanging on her b back. She is richly clad in a tunic ornamented by designs in checks and by a shawl that envelops all the upper part of the body. Facing here is Hermes with hair enclicled by a band, recognized by the wings attached to his heels. He is dressed in a short tunic stopping at his hips and a narrow himation thrown over his shoulders. Nothing indicates the name properly given to the women opposite Hermes. It is perhaps his mother Maia. Nor is there ann reason to establish any connection between t this image and that of the body of the vase. Yet one can recall that in a number of paintings, Hermes figures near Hercules as an aid, who comes to assist him in leaving as conqueror his adventurous undertakings.

Art is here a little more advanced than on the vase of Apollo. If the horses are also nearly as conventional, the faces in the figuresof the man and women havean execution less awkward. T The eye is better placed. The noses are smaller and the chins are less receding. Progress is even more marked on a later vase of the same form aud style.[1] On its body is no mythological subject. On one side are two he-goats walking to the right, and on the other is a sphynx, bearing on the head an ornament in the form of a plume, whose Mycenaean oridgn we have recalled. A motive familiar to Ionian painters are the great eyes here painted below the handles. In the field is the same swarm of accessories as on the other vases. In all that we find the practices of taste of the Melian workshop; but there is on the neck a woman's head, which from its regularity, and one might almost say by the elegance of its profile, attests that the painter already had under his eyes models in which the drawing was freer (Fig. 138).[2]

Note 1.p.474. Böhlau. Eine melische Amphora. (Jarhb.1887.p. 211-215, and Pl. XII).

Note 2.p.474. A sixth amphora of the same type, purchased at Melos, belongs to the English School at Athens (Jour.Hell.Studies. 1902. p.68-72, Fig. 1 and Pl. V).It has suffered much and can be restored but partially. The composition of the decoration seems to have been nearly the same as on the vase of Hercules. On the neck stand two figures facing each other, one female and the other male, holding a cantharus. The last might

be a Dionysos. There are but slight remains of the image on t the body. Yet the remains of the chariot may be distinguished.

With their exceptional dimensions, these great amphoras with heights sometimes exceeding 3.28 feet must have had a special purpose.[3] We freely believe that like those of the Dipylon at Athens, they were made to surmount tombs in cemeteries;[4] but in these workshops must have been made many other vases of less height and varied forms, that correspond to other needs. The secondary products op this manufactore scarcely attracted attention till the day, when in a recent excavation were brought to light numerous specimens. But after 13 years had elapsed, the author of the discovery has yet made no use of it.

Note 3.p.474. The amphora on which appeared the abduction of Iole is 40.35 ins. high. That possessed by the English School is 42.13 ins.

The excavation alluded to here is that executed by M. Stavropoulos, ephor of antiquities, in 1898 for the account of the Archaeoligical Society of Athens in the island of Rheneia, separated from Delos only by a narrow arm of the sea. It is known that the Athenians in 425 at the instigation of the pious Nicias resolved to purify the sacred isle of Delos, which then b belonged to them in full ownership. They undertook to remove all traces of ancient burials. It was decoded at the same time that no more interments should be made at Delos. All the dead of Delos were carried away and interred on Rheneia.[1] The rule established by the Athenians seems to have been respected even after Delos had ceased to depend on Athens. When on the occasion of the excavations long since undertaken at Delos by the French School of Athens, Rheneia was visited, it was easily p perceived that interments had been made everywhere on the island. This having been deserted for long centuries, a rich booty was expected. From the first soundings made at various points, M. Stavropoulos found that there were tombs of all ages, the most recent in great number being of the Roman epoch. Many of them had already been opened, when in the east of the island on that shore looking toward Delos was made a most interesting find. He found a square enclosure bounded by an earthen levee, whose side was about 1640 ft. long. All the interior of the space so limited was filled by bones mingled with fragments of painted vases and clay figurines, as well as other remains of the

ordinary equipment of tombs. There was no more doubt; there must be recognized the remains left by the operation that Nicias caused to be executed at Delos in 425.[1]

Note 1.p.476. Thucydides. I, 8, III, 104.

Note 1.p.478. See the two brief reports of M. Stavroupoulos. (Praktika. 1898, p. 100-104; 1899, p. 6_-69. Jour. Hell. Studies. 1902.p.47-48).

A rapid examination of the pottery found in the excavations confirms these conjectures. In the fragments gathered by basketfuls, nothing appeared later than the date indicated by Thucydides. The most recent came from those Attic vases with red figures and a free style, which chromographers refer to the s second half of the 5 th century.

M. Stavroupoulos collated all these fragments and took them to Mykonos. Then he occupied himself in classifying them in o order of style and date, then in each of the lots thus formed, in finding and putting together the fragments that seemed to belong to the same vase. By the assistance of skilful workmen sent him from Athens, he could recompose entirely or nearly so a certain number of vases. Thanks are due him for the zeal and care taken in fulfilling this part of his task; but why did he not make known by an exact and complete inventory the precious collection thus formed? Why has he not also described and repsented a single one of the vases, that he so laboriously restored? Why is it always necessary to await the publication, that he promised long since and whose cost would certainly have been defrayed by the Society archaeologique, if he declared himself ready to undertake it? [1]

Note 1.p.478. See the last Note.

By the courtesy of M. Stavroupoulos, I was able in 1907 to survey for two hours those vases of the collection, that had been more or less completely restored, as well as many fragments grouped in a series. I could verify that there were remains of vases from the most diverse sources. The remains of vases of the geometric style were in great quantity. Those of t the so-called protocorinthian and Corinthian vases were in very small number. Attic vases with black figures and red figures were represented in many more fragments. Some pieces seemed to recall the pottery of Naucratis and that of Rhodes; but what

seemed to me to occupy most space was a pottery, that by the light tone of its coating, by the forms that it took and the style of its decoration, was connected with that of Melos. The vases presenting this character were either hydrias or amphoras. Several of these vases have already lent themselves to a nearly complete restoration, and others will do so when it is desired. So far as it was possible for me to judge at first sight, the execution of the ornament and figures was less careful and firm on these amphoras from Rheneia, than on some of those that came from Melos. The themes otherwise appear to be of the same sort; but it is proper to delay the comparison till the time when photographs and drawings of these vases and fragments will permit a more serious examination of the pieces furnished by the excavations of Rheneia.[1]

Note 1.p.479. M. Hopkinson, who likewise subjected the collection to a rapid examination several years before me, recognized there the various series that I have just enumerated.(New evidence on the Melian amphoras; Jour. Hell.Studies.1902,p.46-75.

By these excavations as by the text of Thucydides, it was d demonstrated that Delos was despoiled for the benefit of the neighboring island, of funerary deposits that had been accumulated there by the generations, that succeeded each other there from prehistoric times until about the end of the 5 th century. All that one could hope to collect at Delos from the equipment of the abandoned cemeteries was then some small remains that fell on the ground at the time of the removal of the skeletons and the ashes. Perhaps there were also some tombs, that were too deeply sunk or placed an a distant corner, which escaped the search of the workmen charged with that task by Nicias. In those conditions the French School of Athens knew in advance that nothing could be found in its territory of Delos, that w would resemble the contributions of Rheneia. The harvest had been made at Rheneia. At Delos could only be gleaned some forgotten gleanings. The young pensioners of our School however did not allow themselves to be discouraged by the unfavorable situation thus made for them. They were only more scrupulously attached, particularly in those last years, to gather even the smallest fragment of the painted pottery found in the rubbish of their trenches. All those fragments were grouped and classified in the glass cases of the museum of Delos, and two pens-

pensioners of the School, MM.F. Poulsen and C. Dugas, especially devoted themselves to the study of these remains.[2] What resulted from their work is, that there was every reason to expect, that the ceramics whose remains have been found at Delos in various places and especially in the vicinity of the sanctuary of Apollo and of Artemis are the same as those, whose presence has been proved at Rheneia. We are assured that to the works already mentioned it is necessary to add those of the Dipylon, of Cyprus, Beotia and Eubea.

Note 2.p.479. F. Poulsen. Fragment d'un vase funeraire decouvert a Delos.(Monuments et memoirs. Vol. XVI, p. 19-37, Pl."9). M. Dugas has described the entire collection in a memoir entitled:- La ceramique a Delos, de l'epoque mycenienne au cinquieme siecle. From this memoir submitted to the judgement of the Academy of Inscriptions, we have borrowed the little that we say of the finds of Delos. It is to be desired that this catalogue should soon be published. It was drawn up with the greatest care, it is the work of a ceramographer already very well informed and very competent. M. Dugas does not fail to indicate, that for the preparation of his memoir, he profited by the notes that M. Poulsen made on what can be termed Delian ceramics. Numerous photographs have been added to the memoir.

Another peculiarity is indicated that distinguishes the two collections. Both contain in notable quantity the fragments of vases that must have been entirely similar to those termed vases of Melos. At Rheneia the fragments of that sort appear to nearly all come from vases, hydrias or amphoras, that were of medium or small dimensions. At Delos on the contrary, were found many that by the thickness of their walls and by the proportion divined between their fragments and other parts of the whole, announce themselves as the remains of vases whose height was nearly that of the tall Melian amphoras, that we believe were placed on tombs. What can be decuded from these observations is, that the workmen of Nicias were only charged with the skeletons and the more or less broken vases of ordinary form which they found in the interiors of the tombs, to transport them to Rheneia. As for the great amphoras that formerly served as marks of interments, they were doubtless already broken in the 5 th century, when the transfer commenced, and the fragments were lying on the ground, too heavy for them to desire

to trouble themselves with these.[1]

Note 1.p.430. Dugas. La ceramique a Delos, etc. p.83.

To one of those vases that formerly surmounted tombs appear to have belonged one of the most important fragments furnished by the excavations of Delos.(Fig. 240). This is the remanant of the body of an amphora. The surface of the body was divided into several compartments limited by vertical bands. In one of those panels is seen a lion walking. That is a purely decorative image; but what reveals the true character of the vases is the figure contained in the adjacent panel. Unfortunately we have only the top; but what remains suffices to show a bearded man to whom is given that attitude of funereal lamentation, w which we know from the vases of the Dipylon.[1] Both arms were bent, one behind and the other before the head, on which the hands meet, making the gesture of tearing the hair. Was the p person seated or standing? One cannot say.

Note 1.p.431. Histoire de l'Art. Vol.VII, Figs. 5, 6.

According to all appearance, if this vase had the same purpose as the amphoras of Melos, it came from a workshop sensibly more ancient. The figures were placed on the same coating of light yellow as on the fragment from Delos; but their drawing is much more summary and awkward than at Melos. On the lion a as on what remains of the courner, the members are like threads. They are indicated only by doubling the line that by itself m makes the entire image. To mark that the body of the lion has its thickness, the painter has scattered black dots on the interior of the figure. To simplify his task, he has represented only a single paw behind and before. Here as with the amphora of Thera, of which we gave a partial reproduction (Fig. 231), one feels as on a frontier. The painter has attempted to represent the man and the animal; but it is divined, that all his training was made in the school of the geometric style.

The execution was more advanced on another vase, of which remains only a head anf the bust of a woman that with the left hand raises a crown (Fig. 241). The face is drawn in line on a white ground; but the tunic that envelops the bust is painted in opaque form. What especially forms the interest of the fragment is the coiffure and the ornamentation of the woman. Behind the head float two long tresses of hair, that by their movement recall the plume of the Mycenaean sphynx. At the ear

is a large round disk from which hangs a thread that must serve to support a metal ball or some other small jewel. All trace of that jewel has disappeared.

We shall borrow no more from the fragments so patiently collected and described. This was not a useless trouble taken by these young archaelogistss, who applied themselves to this task. The series established by them inform us on what can be termed the power of the export of the different products of the archaic age. They cause us to know from whence was supplied the market of Delos, and they show us as flowing to it at a certain time pottery, that by its material and decoration recalls very closely that of Melos; but it is unnecessary to ask from the dust of these remains what it cannot give. It is not from that which we can learn where the ceramics of the Cyclades had its principal centres of production, under what influences ware formed its style and its evoltion was accomplished.

It seems that in this respect more hope could be based on T Thera, where the vases were preserved in the tomb; but if there the cemeteries have shown themselves very rich in vases of the geometric style, they have given scarcely anything for the succeeding period, for the time when the ceramist, after having varied his repertory by introducing in it motiveu offered to him by oriental fabrics, desired to project on the clay of his vases the images of gods and heros, men and women of his people, and to succeed better in it, employed more boldly contrasts of color. Thera has furnished but a single vase that shows this change and this progress of taste. While this vase presents c certain traits that authorize its comparison to the pottery f found at Delos and Melos, it shows peculiarities that make it aamonument unique in its kind.

This piece is a round plate 9.84 ins. in diameter (Fig. 242).[1] It presents on the exterior 4 rectangular projections that aid holding it. At the top of the disk and over the heads of the persons are two holes in which could be inserted a little cord or metal wire, which gives reason to assume that this plate formed aopart of a table vessel. It had been fashioned to be suspended against the wall od an edifice. It had the same purpose as those votive plaques of Corinth, of which we have given more than one specimen;[2] it came from some sanctuary. What tends to confirm this conjecture is the theme of the decoration. In

the medallion that is formed by a band of sawteeth, two women with legs cut off at the ankles stand facing each other. They appear to be speaking. One of them carries the left hand to the chin of her companion. Her lowered right hand holds a crown. The other woman allows her left hand to fall, its fingers also holding a crown.

Note 1.p.483. Dragendorff. Theräische Gräber. p. 222-225, Pl. II (Vol. II of the Thera Hiller von Gärtingen. 1884).

Note 2.p.483. Histoire de l'Art. Vol. IX, Figs. 99-113.

The only face of the plate exposed to view presents a rich and varied coloring, of which only very feeble traces now remain. No coating here. The colors were placed on the clay itself, a gray clay which resembles that of the so-called protocorinthian vases. There were three of these, a light violet, a reddish brown and white. The violet gave a ground on which the figures were detached, whose flesh and clothing were white. T The women are clothed in long tunics held at the waist by a belt. Over this tunic is cast a short mantle, that falls in a point at the back between the shoulders. The tunic was ornamented by a broad vertical band colored red. There was also red on the border of the mantle. There was some on the band that served to enclose the painting. It is probably that the brush had laid some touches of red on the lips and the eyes; but except the violet of the ground, the colors have scaled and the whole has assumed a very dull tint. It is now very difficult to take account of the appearance that this painting presented when new.

The principle of the decoration was not the same here as on the amphoras of Melos ind those of Delos. On Melian pottery t the figures rise in dark on a light ground. Here is the opposite effect. the field is darker than the images. This is already almost the result of the Attic vases with red figures on a black ground. The island potter certainly had not a suspicion of the fortune reserved by the future for this new mode of presentation. It was with him only a fancy without future, an attempt whose idea was suggested to him by the desire that he experienced on some fine day to diversify the products of his workshop; but it is no less interesting to see announced afar by an isolated attempt, one of those changes of taste and of method, that of one may so speak, are in the air long before

the hour sounds when they become facts.[1]

Note 1.p.434. In the Annual of the British School at Athens. Vol. X. 1903-4. Hopkinson published in colors a fragment of a pinax discovered at Praesos in Crete. There is seen on one side a man that struggles against a marine monster, on the other being a horseman. If we do not place this fragment in line, this is because the vase from which it came does not seem to us to be connected with the ceramics of the Cyclades. No light coating. The figures are placed on a chamois colored ground and t they are black, where the drawing appears firmer and more advanced than on the amphoras of Melos. This vase is neither from the same workshop nor of the same time as the amphoras. The f field is here free from all parasitic ornament.

Entirely exceptional as may be the mode decided on there by the painter, there are analogies between this unique piece and the vases found in the other Cyclades, that prove a sufficiently near relationship. As the potter to whom is due the amphoras found at Melos and Delos, that of Thera takes pleasure in the play and contrast of colors. Although the tones may not be distributed there in the same fashion as on its rivals, its p polychromy is no less lively and varied. As for the drawing, it has the same character in all parts. It errs less by inaccuracy than by a certain softness. Everywhere there are thin members, and nothing indicates either the muscles or the joints. These are further merely general resemblances; but one can indicate some traits, and attest closer relations. Let one recall the fragment of a Delian amphora, on which is seen the bust and head of the image of a woman (Fig. 241). Where we do not have the lower part of the body here, but it rests on the fragment with one hand raised to the height of the head, and as on the plate of Thera, this hand holds a crown. Another similarity; the three female heads have the same ear pendant, a disk of m metal in which is inserted a gem of vivid color. If other bits of the Delian amphora were gathered, and if the painting were restored, perhaps would be found there a group that would be nearly similar to that of the vase of Thera. The two painters have represented the same rite, that of votive or funerary offering. They have given their persons the same pose and the same decoration.

Then between these vases collected in the Cyclades are very apparent affinities, for those dating in the reign of the geometric style, for those that feel the influence of oriental models, and for those which especially interest us here, for the pottery that shows us Ionian art at its full fevelopment. The insular ceramics of that last period is particularly represented by the amphoras of Melos in the actual state of our k knowledge, and it will be thus until the day, perhaps still distant, when we shall know what to decide on the finds of Rheneia. Without awaiting that time,,after having glanced at the collection formed at Mykonos and after having studied the fragments gathered at Delos, it may be stated that at Delos were many fragments which came from amphoras very similar to those of Melos. Men start from that fact to ask if it was only at D Delos that Melian vases were made.[1] One is inclined to believe, that this was in the workshops grouped around the temple of A pollo and of Artemis, that pilgrims who came to be present at the religious festivals of Delos purchased these vases, then to carry them away into the different islands that they inhabited. If the amphoras in question are found in greater number and better preserved at Melos than elsewhere, this would be t the result of one of those chances with which it is always necessary to count, when he attempts to tear from the earth the secrets of extinct civilizations.

Note 1.p.486. Hopkinson leans toward this hypothesis in his study entitled:- New evidence on the Melian amphoras.(Jour. Hell. Studies, 1902, p. -8), aod according to a letter written to me, M. Dugas would freely be of the same opinion.

Unfortunately, there is nothing in either the literary texts or the epigraphic texts, which confirms this conjecture, and the excavations in our knowledge have not revealed at Delos the existence of a Ceramicos, a quarter in which were grouped those workshops to which it is desired to attribute so much activity. All that is known of Delos does not seem favorable to the hypothesis of the Delian origin. Delos was long the great emporium of the maritime commerce in the Egean sea, an advantage that it owed to the place itself that it occupied in the middle of the Archipelago on the routes of all ships, and to the shelter that these found there from almost all winds in the channel that separates Delos from Rheneia; but nothing gives

reason to think that Delos ever was an industrial centre of some importance. Men lived there by business, by the transit of merchandize which came to be piled on the quays; but it was necessary to bring there from outside everything consumed there, both to provide for the primary needs of life, and to embellish that life with some luxury. The island was too small a and its soil was too poor, that it could feed its inhabitants. This soil was composed of elements too little varied to supply to artisans the primary materials that they had to employ. The neighboring islands sent to the Delians grains, vegetables and fruits; they likewise furnished them with wood and charcoal. An inscription has preserved for us the text of the regulation to which was subject the importation of these provisions.[1] Marble was employed in all its forms and was everywhere in the i island. Lime-burners have exploited it for centuries, since Delos became a deserted island, to make lime which was sold to masons in the entire Archipelago. Yet it is known that marble remains at Delos, where fragments of that rock strew the soil everywhere; but nearly all this marble came from Paros and Naxos, where in workyards that never rested, stonecutters and sculptors cut it into blocks ready to go into buildings, into thin slabs on which were inscribed decrees and accounts, into reliefs and statues, that came to take their places in edifices for which they were intended.

Note 1.p.487. Schulhof and Huvelin. Loi reglant la vente du bois et du charbon a Delos. (Bull. Hell. Corr. 1907.p.46-93).

-ondemned even by its situation to pay this tribute to its neighbors, Delos could also borrow from some other island of the Cyclades the painted vases that it buried in the tombs of its inhabitants. Even today Myconos, that lacks plastic clay, the nearest island brings from Siphnos all the pottery that it employs in the various uses of life.[2] There is neither at Delos clay that lends itself to making of pottery.[3] Now nothing prevents admitting that about the 7 th and 6 th centuries B.C., the ceramic industry may have been particularly flourishing in this island of Melos, where have been found such curious examples of it. The earths of Melos are very varied in composition according to geologists. They mention large beds of clay interposed between beds of tufa pumice.[1] The potter then had there

at the works the primary material. Doubtless he fashioned it and decorated vases in the other islands of the Archipelago. Proof is made for Thera, which like Melos presented a great diversity of earths; but the workshops of Melos were perhaps the most active and best utilized, that were possessed by this little world of the Cyclades, which early had its original civilization and that long retained its separate life, until the formation of the maritime empire of Athens. In the fine season, all these islands are separated from each other only by some hours of navigation. Barks go from one to another without risk, loaded with passengers and merchandize. The attraction of religious festivals and the needs of commerce must cause those barks in great number to converge at Delos, the common meeting place of all these islanders. They found themselves at Delos among relatives and friends to talk, exchange news and ideas. They were certain to place their merchandize there, to bring back in return what they had found to purchase in the retired island, that was inhabited for the rest of the time.

Note 2.p.487. Hopkinson.(Jour.Hell.Studies. 1902.p.58).

Note 3.p.487. This is what M. Cayeux, Professor at the Ecole des Mines, has courteously informed me, who made a very careful study of the subsoil of Delos. I reproduce here the letter that he had the courtesy to write me on this subject:- "There is not and never was true plastic clay at Delos. It is very certain that all or nearly all the primary material utilized for the fabrication of Delian pottery was imported, if it be admitted, which is entirely improbable, that the vases were made at Delos. I say nearly all, because a granite rock of the island has produced in decomposing at the surface, a small quantity of argillaceous earth of light gray color, forming a plastic paste with water. I brought home in 1906 a sufficient quantity of this s substance to proceed to experiments. Under my eyes, there were made of it some little vases that were fired with specimens of plastic clay to serve as checks. I obtained an extremely fragile pottery of a very light gray color, completely deprived of iron, analogous in appearance to some Delian pottery, but absolutely different from the hard pottery containing iron, that abounds at Delos."

My conclusion is that there existed in that island a small quantity of clay of very bad quality, which was perhaps utilized

by the ancients, but which was certainly not the source of the primary material employed for making the innumerable pottery of a paste containing iron, whose remains abound at Delos." (Jan. 25. 1911).

Note 1.b.488. Sauvage. Description géologique de Melos.(Annales de Mines. 4 th series. Vol. X.p.69-100).p.74.

Whatever may be the role and the importance that we believe should be attributed to the workshops of Melos, what is certaain is that about the end of the 7 th and the beginning of the 6 th centuries, the Cyclades had a ceramics that from one island to another reproduced the same types, and that these ceramics was connected with the great family of Ionian ceramics.

The potter of Melos was inspired by the examples and the traditions of the Ionian potter. Like him, before takink up his brush, he lays on the clay a coating, whose white has turned to yellow by the effect of time. On this coating he placed figures and ornaments that dominate in a frank black, and on which he laid in places touches of red that accent certain details and enliven the appearance of the painting. He designs the heads and members in outlines on that light ground, while herepresents the bodies in opaque forms.

In the whole the processes of execution here are nearly the same that we defined when we were studying in Ionia the work of Ionian ceramists; but the analogies do not stop there. The linear ornaments scattered in the field are the same as on many vases of Naucratis and of Rhodes; but there is no reason to insist much on these resemblances. A legacy of the past, these filling ornaments are found nearly similar on proattic vases. What is more significant is the role played on the Melian vases by certain motives borrowed from the animal and plant realms. If one motive be dear to the Ionian painter, this is indeed t that of a procession of marsh birds. On his most ancient works, on the Rhodian oenochoes, this painter has alternated files of bucks and of deer, those of sphynxes and of griffins. A little later, he also reserved a space for them on vases, when the p painting is no longer pure decoration imitated from that of o oriental fabrics. It is the same at Melos. Above the painting in which are the two great deities of Delos, Apollo and Artemis facing each other, extends a band dotted by rosettes, where ducks are passing in a file (Fig. 235). In the Cyclades as at

Naucratis and Rhodes, the potter likes to insert a lotus garland between the different bands of his decoration. He renders in the same fashion this flower of the lotus borrowed from Egypt. He summarizes the abundance of petals in three points that he encloses between the longer sepals of the calyx. This is a convention peculiar to Ionian decorators. Among the Corinthians and Athenians the petals are usually represented only by a single point at the separation of the sepals (Fig. 227).

Finally, in the more important of the paintings of Melian c ceramics is a trait, that evidences a taste already mentioned in the Ionian potter, the taste for one of those details with no object other than to amuse the eye of the spectator by their unexpectedness. One recalls the fine swallows, that on the Levy vase are perched on the tails of the lions and hop on the rosettes Fig. 223). Now on the manes of the winged horses of the chariot of Apollo the painter has placed a little bird, t that turns his head toward the god (Fig. 235); but what a difference in the execution! The Melian bird is heavy and its species is unknown, while on the vase of Rhodes by the forked tail is recognized at once the swallow.

If the workman in the Cyclades is thus a pupil and imitator of Ionian ceramists, he is far from having their skill and lightness of hand. Doubtless his ambitions are higher than those of the first Rhodian potters inspired by tapestries and metal cups. He livishes the human figure on his vases, shown in bust and on foot. He represents those deities of Olympus most devotedly adored in the region inhabited by him. He places in the scene heros opposed, like Hercules the abductor of Iole, in some of those adventures that diverted the popular imagination; but the execution leaves much to be desired. The form that he has given to his amphoras is not happy (Fig. 233). The handles are narrow. Too small, they hardly allow room for the hand. T The neck is too wide and is not frankly detached from the body; but what is especially bad in effect is the foot like a truncated cone, that does not seem suited to support the weight of a very ample body. At the junction of the body of the vase and this conical foot is a sort of reduction not pleasing to the eye.

As for the drawing, it has defects that we have mentioned in even the most advanced paintings of Naucratis, Daphnae and Rhodes. It lacks accent in the rendering of nude members. On the

other hand in the profiles of heads, it exaggerates and deforms the lines. Here is found that eye too large, nose too pointed and a long chin, that we have already met on certain fragments of Ionian pottery (Fig. 23.); but at Melos hre movements have less suppleness and the attitudes are less natural than in some paintings that have passed under our eyes. Apollo and the muses in their charior, Artemis behind the deer that she holds by the horns have very stiff poses. There is only the deer raised on a hind leg, whose movement is well seized. The winged horses that draw the quadriga are all of entirely pattern design. Yet in spite of these weaknesses that do not strike at first sight, the entirety of the composition does not fail to have a grand air, and as much can be said of the scene representing Hercules carrying off Iole (Fig. 236). In the inexperience of the a artist that traced these images is felt a sincere effort, that promises and which cannot fail to end in a brief delay.

What still injures the general effect here is, that when the decorator has undertaken to place on his amphoras scenes that may speak to the mind, that he has not known the mode of clearing the field, of detaching his figures. Like the painter of the Rhodian plate of Hector and Menelaus, he has scattered everywhere a profusion of linear ornaments that were transmitted to him by earlier styles. He has particularly abused the spiral, one of those motives. He has lavished it in all parts of the field, in horizontal scrolls that extend around the body and in groups formed of four conjugate volutes. On that of these amphoras which we have reproduced entire, he has given it such importance as to first attract the entire sight (Fig. 233). At the first moment, it diverts the attention, almost prevents t the perception that the two horsemen there facing each other, are of very free design and well placed on their mounts.

Altogether, if this insular ceramics has its originality, if it merits being studied even in its smallest remains, it cannot rival in variety or elegance that of Naucratis and of Rhodes. To consider it in its entirety, it truly has something slightly provincial, in even its most careful works. Thus is it explained that the vases, whose best types have been furnished to us by Melos, are found nowhere else than in that of the neighboring islands. No trace has been found in Asian Greece of its

colonial annexes, in European Greece, nor in Italy for a stronger reason. These island workshops have not been equipped for exportation. Thew have not produced sufficient, or at least their works have not seemed beautiful enough, that the foreign buyer should seek them and purchase them. At Thera, Melos and Delos, if as desired, kilns were lighted at Delos, the potter worked only for the local market. All these islands were well peopled and prosperous, ensuring it a patronage that sufficed to remunerate it for its pains.

7. Cups of Cyrene.

In the course of the research that we have undertaken, we have not left Ionia, in spite of the length of the journey necessary to follow all the turns. These Miletan agencies of Daphnae and of Naucratis, that have long retained us in the slow waters of the mouths of the canals of the Nile, were extensions of Ionia and like districts that some artifice had detached f from the mother country. Rhodes was an annex. to Ionia, almost of the same degree as Samos and Chios. As for the Cyclades, it is true that their population was very mixed. A,, the Greek t tribes were represented there; but certain of these islands, like the two largest, Paros and Naxos, the two most fertile a and the richest of the Cyclades, were Ionian by race and language; they maintained intimate relations with Miletus. Other islands like Melos and Thera had received Dorian colonists; b but even there, these had perhaps merely superposed themselves as a sort of aristocracy on a primary layer of Ionian elements. In any case, whatever the branch of the Greek nation to which they belonged, these islanders of the Cyclades all gravitated around Delos, a market of exchanges that they found profit in frequenting, the scene of religious ceremonies with a pomp seducing their imaginations. At this epoch, what particularly e ensured to Delos a privileged situation was the prestige of its cult of Apollo and of Artemis. The two children of Latona were especially the great Ionian deities, who had presided over the migrations and the conquests of the ancestors, and whose tutelary goodwill guaranteed to new generations the peaceful enjoyment of the property acquired.

If the Artemis of Delos was perhaps less popular and was surrounded by a less fearful veneration than the powerful Artemis of Ephesus, the Apollo of Delos was no less devotedly hon-

honored by the Ionians than the Apollo Philesios of Miletus, and he had over him the advantage that the god passed as having been born at Delos, that there was shown at Delos the palm against which Latona leaned to give birth to Apollo and his s sister. Even the Greeks not of Ionial blood were sensible of the charm of these memories. They were pleased to associate at the assemblies, where by the gymnastic games, the songs, music and dancing, the Ionians celebrated the benefits from their d divine patron and solicited their continuance. They mingled w with that multitude, where Ionian feeling was exalted in the community of religious emotions and patriotic memories. The l living echo of this feeling is heard in the beautiful verses of the Hymn to the Delian Apollo, which has come to us under the name of Homer.[1] Gathered around the sanctuary with their wives and children, all clothed in long tunics, the Ionians admired themselves in the splendor of their costumes and in the magnificence of their festivals. Hear the poet express their transports:- "He that sees the Ionians when they are assembled would take them for immortals that escape there the attacks of age. He would be touched by their grace, and would rejoice when he regards the men, the women with beautiful girdles, the swift ships all loaded with riches." Since the Delian girls, servants of the god, after having celebrated Apollo, Latona and Artemis, mistress of arrows, sang "the hymn of the men and women of former times and thus charmed every soul." Doubtless they repeated those epic tales in which were established the geanealogies and related the stories of the heros and heroines of the Italian race. Even those present that were not of the family were not free from the enchantment. When they left the eulogy to return home, they recalled the beauty of the scene, the songs and rhapsodies of Chios and of the Delian virgins; they remained subject to the ascendant of the Ionian genius. The Cyclades from Ceos and Syros to Melos and Thera a and always Ionia.

This Ionia, cradle of the poetry and of the arts of Greece, that we must now leave to seek beyond the sea works on which they exerted at that distance the influence of the types of Ionian ceramics and of its procedures of execution.

There have been gathered in small quantity at Naucratis, in

much greater number in the results of the excavations in Tuscany, painted vases with Greek legends and subjects, which in spite of the variety of their dimensions and their forms, seem to have a common origin. All concurs in giving that impression. There is first among all those pieces a certain similarity of fabrication. This is the very frequent use that the painter m made there of an ornament composed of pomegranates susbended from a thread enclosing the necks of vases, or running around the border of the cup. The pomegranates are recognized not only by their form but also by the pistils shown at the top of the fruit (Fig. 242). Everywhere there, on the crateras and hydrias as well as on the cups, a white glaze was applied on all or on a part of the surfaces of the piece. Where the glaze seems to be lacking, this is often that being too fragile it has not held its place; a more careful examination discovers it sometimes. There are very few vases of which one can affirm that they received no coating. 1

Note 1.p.492. Homer. Hymns. I. V. 145-164.

Note 1.p.494. The most recent study devoted to this group of vases is the Essai sur les vases de style cyreneen by C. Dugas and R. Laurent. (Revue arch. 1907[1]. p. 377- 09; 1907[2], p. 36-58). There will be found defined with precision the characters common to all the vases that compose this group, whatever the forms found there, processes of fabrication, and notably the coating, then also the choice of themes and of motives of ornament. The Memoir ends in a catalogue, that is the most complete given of the vases, which can be attributed to the so-called Cyrenean fabrication.

Since these have been compared together to form a homogeneous group, the vases marked by these peculiarities, there has been m much discussed the question of knowing where it is necessary to seek their native land. Many conjectures have been expressed on this subject, none of which has appeared to merit being taken into serious consideration, until the time when the name of Cyrene was pronounced.[2] What suggested this hypothesis is the celebrated cup known under the name of the cup of Arcesilas, found at Vulci in Etruria (Pl. XX).[3] It represents a prince of the dynasty of the Battiades, very probably Arcesilas II, contemporary of Amasis, presiding over the weighing of the

silphium. The prince doubtless reserved the sale and export of this precious product, a monopoly worth to him a very great r revenue. The juice extracted from the stem and the root of th-is plant, Thapsia silphium of Linnaeus, mixed with flour pass-ed as a true panacea among all the coastal peoples of the Med-iterranean; it was brought from Cyrene at a very high price. Ser-vants bring it and go to place it in a storehouse under the eyes of the king, the stems of the plant packed in bales. The king is clad in a long tunic over which is cast the himation, whose ends are coiled around his arms, and is seated under a tent, of which is seen only the ropes that raise the draperi-es. He is bearded and wears the petasus with recurved edges, terminated by a top like a lotus flower, laced boots with rec-urved points, a sceptre in the left hand. His hair is very long and hangs on his back. Before him hastens and runs the c crowd of servants, occupied by their task; one of them is a s sort of commissary, and stands before the master and receives orders or renders accounts. Under the folding seat of Arcesil-as, a seat without back that the Greeks called okkladias, crou-ches a little panther and a lizard ascends the wall behind. T Two birds of and a small ape are placed on the great beam from which is suspended the balance. In the field are flying two o other birds, one with a very long beak that appears to be the African stork, the marabout.

Note 2.p.494. Löschke first gave a general study of these vases (De vasi quadam prope Spartam reperta. Dorpat program. 1877); but he attributes them to a Dorian workshop, such as Sicyon or Sparta. Soon afterwards, Puchstein proposed to refer them to the workshops that had been established at Cyrene (Kyrenaische Vasen in Arch. Zeit. 1880. p. 185-186, 1881. p. 215-250); but the indications which he noted did not carry conviction. Klein (Euphronios, 2 nd Edit., p. 87) and Milchöfer (Die Anfänge der Kunst, p. 171-183) also again speak, one of Laconia and the o other of Crete. Pottier in 1885 did not yet dare to decide (L (Les ceramiques de la Grece propre, p. 293-313).

Note 3.p.494. This image has very frequently been published. The best copy is that given in color by Babelon in La cabinet des antiques a la Bibliotheque nationale (1887-1888. Pl.XII).

Note 4.p.494. Pliny. H.N.XIX, 15.

We have some difficulty in comprehending what one was formerly

advised to see in this painting, the idea of turning into derision the tyrants of Cyrene and their mercantile habits.[1] Archaic art has none of this derisive fancies. Among the Greek meramists of the 6 th century as among our image-makers of the middle ages and the Italian painters of the quattrocento, they applied themselves to copy nature conscientiously, and since their skill is far from corresponding to their intelligence, it was not without some awkwardness that they came to reproduce certain traits and movements. To cause the sense to be seized, they accented and exaggerated. As this exaggeration of the drawing is the favorite procedure of the caracaturist, before having sufficiently studied the primitives, one could attribute to these artists intentions which they never had. What the painter here proposed is to render as faithfully as possible the appearance presented by the court of the palace, or a corner of the port when the prince proceeded to receive the bales of silphium. The artist wished to take an instantaneous view of the scene, as would be said today. So he has tried to omit nothing of the details of the costume and of the accessory traits, such as the presence here of all these exotic animals, that localize the image and give it a striking character op reality. Thus understood, with the singularity of this painting, with the inscriptions read near each person that define his part, it was well made to amuse those foreign patrons for whom the maker of the vases destined them. To the foreigner, the purchases of this cup, it gave the sort of pleasure, that we obtain todaw from a photograph either brought from a bazaar of Damascus or cairo, or from some port of the extreme Orient. One must buy it for curiosity, just as he purchases today the illustrated postal cards, that bring so many monuments under our eyes, as well as landscapes of distant lands.

Note 1.p.495. Welcker. Alte Denkmäler. Vol.III,p.494.

At the first glance at this cup, the European Greek or Etruscan felt himself led to seek in very different surroundings f from those in which he lived, the scene of the action figured here. This tame panther, that sleeps under the feet of its master like a cat, this fimiliar ape that enjoys himself in the structures of the royal warehouses, all this is scarcely seen at Corinth, at Miletus, still less in the valley of the Arno. It is divined that this painting was executed by an artist who

worked near Egypt, in a Greek city in which the influence of
[illegible]
[illegible]
reliefs of the tombs of Memphis, where the chief of the
[illegible]
him being all the slaves occupied in weighing the
[illegible]
ference in height between the master and his slaves. The
[illegible]
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ient who controls.[1] Several slaves, like the fellahs of to-day of the Nile, have no clothing other than short drawers fastened around the loins. The official that supervises the
[illegible]
ation proposed for that title is that recognizing in the first part of the word the name of the silphium under its indigenous form, which the Greeks had slightly modified for convenience
[illegible]
word means, "the balance." 2

Note 1. p.136. [illegible] (Paris. 1880). p. 6, Figs. 4 to 6.

Note 2.p.433. Puchstein. Arch. Zeit. 1883. p.136, note 16.

The official title of this person would have been that of the weigher of silphium. The creation of this composite
[illegible]
cial classes of the Delta, relations whose intimacy we divine from some of the facts mentioned by Herodotus.[1] Amasis had contracted with Cyrene an offensive and defensive alliance. He had taken a wife from Cyrene. Besides his portrait painted on a cedar board, he had sent there statues of Hathor and of

Note 1.p.137. Herodotus. II. 181-182.

[illegible]

[illegible] of Cyrene, for a Greek painter; but neither because not [illegible] produced silphium and in either of the two cities, why should any one have had the idea of taking as the theme for the decoration of the pottery, this scene of the official life of the tyrants of Cyrene? On the contrary, nothing would be more natural at Cyrene. The subject imposed itself by the advantages that it assured to the [illegible] ty of its government, silphium played such a part in the c

worked near Egypt, in a Greek city in which the enfluence of Egypt made itself felt, and its customs and art , even its language. By its entire arrangement, this painting recalls the reliefs of the tombs of Memphis, where the chief of the family is seated or standing at one extremity of the field, before n him being all his slaves occupied in bringing him the fruits of his domains. As in the reliefs, here is a very sensible difference in height between the master and his slaves. The form of the seat of Arcesilas and its feet with lions' paws is that of the seats represented in the Egyptian paintings of the ancient and new empires.[1] Several slaves, like the fellahs of the banks of the Nile, have no clothing other than short drawers fastened around the loins. The official that supervises the weighing is termed slipnomachos. Now the most probable explanation proposed for that title is that recognizing in the first part of the word the name of the silphium under its indigenous form, which the Greeks had slightly modified for convenience of pronunciation, and in the two final syllables the Egyptian word macha, "the balance." [2]

Note 1.p.496. Studnicza. Kyrene, eine altgriechische Göttin. (Leipzig. 1890). p. 9, Figs. 4 to 6.

Note 2.p.496. Puchstein. Arch. Zeit. 1886. p.186, note 15.

The official title of this person would have been that of t the weigher of silphium. The creation of this composite hybrid attests the relations that Cyrene entertained with the commercial places of the Delta, relations whose intimacy we divine from some of the facts mentioned by Herodotus.[1] Amasis had contracted with Cyrene an offensive and defensive alliance. He h had taken a wife from Cyrene. Besides his portrait painted on a cedar board, he had sent there statues of Hathor and of Neith.

Note 1.p.497. Herodotus. II. 181-182.

Doubtless the conditions would have been nearly the same at Naucratis and Daphnae as at Cyrene, for a Greek painter; but neither Daphnae nor Naucratis produced silphium and in either of the two cities, why should any one have had the idea of taking as the theme for the decoration of the pottery, this episode of the official life of the twrants of Cyrene? On the contrary, nothing would be more natural at Cyrene. The subject imposed itself by the advantages that it assured to the country of its sovereigns, silphium played such a part in the economics

life of the city, that from the time of its kings as after it had recognized its liberty, it had never ceased to place on i its coins the stem and fruits of that shrub (Pl. VII, 22). Cyrene had adopted this image as its traditional blazon like the canting arms.

The so-called cup of Arcesilas was then made at Cyrene, that cannot be doubted. Marvellously preserved, it furnishes us with a sort of archetype that arouses suggestive comparisons. It p permits the same origin to be attributed to all vases of the same quality of clay, on which we find the same light coating, the same garlands made of buds, flowers and fruits of the pomegranate. Another piece on which the technics is entirely similar also comes to confirm this hypothesis. This concerns a cup that unfortunately is very mutilated; scarcely half of it has been found (Fig. 243). In spite of the extent of the gaps, the general sense of the subject is seized. The same free and decided charm as on the cup of Arcesilas; the same taste in movement and amusing detail. Birds fly across the space or are perched on the border of the field and on the branches of a t tree. Poses and gestures are expressive and varied. The principal person was a woman of great height, that stands in the middle of the field. In her is recognized Kyrene, the eponymous goddess and mystic founder of the colony. In one hand, of which there is some trace on the original, she holds a branch of silphium, represented as it is on the coins; doubtless the other hand balanced a little higher what seems to be a pomegranate branch. Before and behind Kyrene hover winged geniuses with arms extended toward her in the attitude of homage and prayer. Some are masculine and others feminine. The first are perhaps the Boreades, representatives of the North wind that after having crossed the Mediterranean cast vivifying waves on the plateaus of Cyrenaica. As for female geniuses, they would be the nymphs of the Hesperides. The famous gardens of which they were guardians, passed as being somewhere in the interior of the territory of the colony, and they are also represented on the coins with their tree with apples of gold. It is believed that the thought of the artist is seized; what he desired to recall and represent by this comparison is the richness and fertility of the Cyrenaic region; the action and play of beneficent forces make the soil fruitful.

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es and greatly embarrassed archaeologists; but the ceramic pa-
inters of Cyrene have always taken their subjects in the sight
presented to them by the life of their natal city, or even in
local myths. The vases in which are recognized the products of
[illegible]
have largely drawn from the treasury of the entire Greek myth.
At the Vatican on the cup called that of Sisyphus or of Tanta-
lus, [illegible]
lets in the works of Greek art.[1] A cup of the collection of arti-
[illegible]
Polyphemus (Fig. 244). The Louvre is very rich in vases of this
[illegible]
[illegible]
ing but one or two bands of passing animals placed between ba-
nds composed of geometric or plant ornaments. On one of them
without handles called a deinos, above the frieze of animals,
eagles, lions and sirens in a higher zone, there are three
distinct subjects, that succeed each other without any separa-
tion established between them by the painter, the combat of H
Hercules and the Centaurs, Achilles in ambuscade to take Troi-
los, and a festal scene (Fig. 245).[1]

[illegible]
[illegible]
Puchstein the three scenes are reproduced in line drawing.

On another cup is the chase of the hare, a theme that Greek
decorators seem to have borrowed very early from oriental mod-
els.[2] [illegible]
bird and preceded by a little flying winged figure.[4] Two cups
[illegible]
without a back. The eagle with expanded wings flies toward him
as if to come to rest on the knees of the god (Fig. 247).[1] This
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des come to us. A no less curious painting is that, where [illegible]
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and lofty plume, attacks at needs a serpent, that seems to [illegible]
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The two cups described present an exceptional interest by t their decoration. They permit assigning almost an assured origin to the entire series of vases, that until very recent times had greatly embarrassed archaeologists; but the ceramic painters of Cyrene have always taken their subjects in the sights presented to them by the life of their natal city, or even in local myths. The vases in which are recognized the products of that manufacture present a very great diversity. Their authors have largely drawn from the treasury of the entire Greek nation. At the Vatican on the cup called that of Sisyphus or of Tantalus, there is the most ancient representation of hades that exists in the works of Greek art.[1] A cup of the cabinet of antiques of Paris bears a scene of the adventure of Ulysses with Polyphemus (Fig. 244). The Louvre is very rich in vases of this kind. Some are of great capacity, cups (Fig. 245), hydrias and crateras of various forms. On most of the great vases is nothing but one or two bands of passing animals placed between bands composed of geometric or plant ernaments. On one of them without handles called a demos, above the frieze of animals, eagles, lions and sirens in a higher zone, there are three distinct subjects, that succeed each other without any separation established between them by the painter, the combat of H Hercules and the Centaurs, Achilles in ambuscade to take Troilos, and a festal scene (Fig. 246).[1]

Note 1.p.500. Gerhard. Auserlesene Vasen.Vol.II, Pl. 86.

Note 1.p.501. Puchstein. Arch. Zeit. 1881. In Pl. XII of Puchstein the three scenes are reproduced in line drawing.

On another cup is the chase of the hare, a theme that Greek decorators seem to have borrowed very early from oriental models.[2] Here is the sphynx,[3] then a horseman followed by a flying bird and preceded by a little flying winged figure.[4] Two cups merit being mentioned. On one is seen Zeus seated on a seat w without a back. The eagle with expanded wings flies toward him as if to come to rest on the knees of the god (Fig. 247).[1] This is one of the most ancient representations of this deity, that has come to us. A no less curious painting is that, where Cadmus is covered by the armor of a Greek hoplite with a helmet and lofty plume,attacks at Thebes a serpent, that seems to forbid his access to a little temple with triangular pediment (F (Fig. 248). Below is a hare between two rosettes.[2]The image of

the temple is of a nature to interest the architect. The pediment terminates at top in a disk, which recalls the great piece of terra cotta found at Olympia, the acroteria of the great t temple of Hera.3 By the manner in which the entablature is drawn is divined open carpentry.[4] The column has a flat and round base that causes one to think of the Mycenaean columns;[5] but the shaf does not have the entasis of those; Its diameter is much greater at bottom that at the upper part. As for the capital composed of three annulets, it belongs to no known order. The support that served as a model for the painter must have been of wood. One can also cite the cups on which are represented Hercules struggling with the Cretan bull,[6] a banquet scene,[7], the chase of the wild boar of Calydon,[8] and on a fragment are Asian warriors or running Amazons.[9] On the remains of a cup from Naucratis, a woman holds a pomegranate in the hand and stands before a seated personage; one is inclined to recognize there Apollo and Kyrene.[10]

Note 2.p.501. Louvre. Hall E,663. See Pottier. Cat. p.389.

Note 3.p.501.Hall E, 664.

Note 4.p.501. Hall E, 665.

Note 1.p.502. Hall E, 668. On this painting, see Studnicza. Kyrene, p. 14.

Note 2.p.502. Hall E, 669. Studnicza, Kyrene, p.33-34.

Note 3.p.502. Histoire de l'Art. Vol.VII,p.543, Pl.XLVI.

Note 4.p.502. Benndorf has made use of this image in his study. Ueber den Ursprung der Giebelakroterien (Jahrb.Kais. Inst. In Wien. Vol. II, p.1-51), p. 14.

Note 5.p.502. Histoire de l'Art. Vol.VI,p.518, Fig. 200.

Note 6.p.502. Hall E, 666.

Note 7.p. 502. Hall E, 667

Note 8.p.502. Hall E, 670.

Note 9.p.502. Hall E, 671.

Note 10,p.502. Studnicza. Kyrene.p.22-23, Fig. 18.

On all these vases for which we do honor to the workshops of Cyrene, white retouches are very rare. It is understood why t this is so. Particularly on pottery with a red clay or dark yellow ground that they have their marked place. With violet retouches, they add to the effect; but where the natural tone of the clay is marked by a coating of light color, they have no role other than to act ar reserved lines, which on the primary

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are true Ionians, that in its entirety the ceramics of Cyrene [illegible] style.

One cannot be surprised by this. It is agreed to place the founding of Cyrene about 624. But it became important and prospered only under its third king, Battos II, when by the aid that Pythia was willing to lend that prince, this city whose existence had been precarious till then, had received a new addition of colonists recruited in all Greece about the year 575.[1] Only after this second founding of the city must have been lighted in number those kilns for fairly ... to which relates a Delphic oracle whose text has been preserved by Herodotus.[2] Only then could Cyrene have its gangs of potters [illegible] vases could not be much earlier than the middle of the 6th century. Thus it appears as one of the secondary developments of an industry whose origins are elsewhere. By the inspiration of models that had been furnished to them by the Ionian workshops of Asian Greece, the potters of Cyrene have created the [illegible] procedure of the white coating; in their works have the found the first elements of a repertory, that they could soon greatly enrich and singularly diversify. They took from them the r[illegible] lotus buds and flowers, palmettes in fan shape, and finally this network with great knots that encloses the neck of most vases of the second Laconian style. It decorates the exterior of the cup of Arcesilas (Vignette at end of Chapter).[3] This [illegible] appears to be the only one that has admitted this ornament. [illegible] servation. On the craters and hydrias, the field is divided in horizontal zones filled by passing animals as on the vases [illegible] number. The circular bottom of some cups presents that divisi

Ionian pottery served to mark certain detalis of ornament and costume. Here the ceramist has preferred to use incised lines for that purpose. The metal point was charged with all that c complementary work. By this change of method, it is divined t that these potters had under their eyes Corintnian and Attic vases, on which this mode of engraving was in current use. We are thus informed, that in its entirety the ceramics of Cyrene is later than that of the second Rhodian style.

One cannot be surprised by this. It is agreed to place the founding of Cyrene about 624. But it became important and prospered only under its third king, Battos II, when by the aid o that Pythia was willing to lend that prince, this city whose existence had been precarious till then, had received a new a addition of colonists recruited in all Greece about the year 579.[1] Only after this second founding of the city must have been lighted in number those kilns for firing amphoras, to which relates a Delphic oracle whose text has been preserved by Herodotus.[2] Only then could Cyrene have its gangs of potters and its school of ceramic painters. The most ancient Cycenean vases could not be much earlier than the middle of the 6 th century. Thus it appears as one of the secondary developments of an industry whose origins are elsewhere. By the inspiration of models that had been furnished to them by the Ionian workshops of Asian Greece, the potters of Cyrene have created the types which we have described. From them have they taken the procedure of the white coating; in their works have the found the first elements of a repertorw, that they could soon greatly enrich and singularly diversify. They took from them the r radial tongues around the foot od the vase, the chaplets of l lotus buds and flowers, palmatiums in fan shape, and finally this network with great knots that encloses the neck of most vases of the second Rhodian style. It decorates the exterior of the cup of Arcesilas (Vignette at end of Chapter).[3] This last borrowing is particularly significant. Ionian ceramics appears to be the only one that has admitted this ornament. For the general arrangement of the decoration is the same observation. On the crateras and hydrias, the field is divided in horizontal zones filled by passing animals as on the ewers of Camiros (Fig. 249); only those zones are here in smaller number. The circular bottom of some cups presents that division

into two unequal segments, which is almost the rule for Rhodian plates (Figs. 244, 248). In the larger segment is a scane taken from some myth, while in the smaller segment the painter has placed only images without any significance, a running hare, birds, lions facing each other, a fish, palmatium, etc.[4] Certain traits transmitted to Ionian art by Mycenaean tradition do not persist here. Rosettes are frequently scallered on the field (Fig. 247); but what is still more significant is, that o one sometimes finds here on the head of the sphynx that appendage in the form of a floating plume, with which the Mycenaean painters and ivory-workers loved to ornament it.[1]

Note 1.p.504. Herodotus. IV. 159.

Note 2.p.504. The same. IV. 163.

Note 3.p.504. The same design is on another cup that came f from Caere.(Puchstein. Arch. Zeit. 1881. Pl. X, 3, 3^b).

Note 4.p.504. Puchsteiu. Kyrenische Vasen. Pl. XII, 2; XIII, 8, 2, 4, 5.

Note 1.p.505. It is thus on a cup in the Louvre, Hall E, 664. On that appendage, see above, p. 449-450.

If the monuments permit no doubt that the pottery of Cyrene is connected by a bond of filiation with that of the principal industrial centres, one does not fail to experience at first some surprise in proving that undeniable fact. Cyrene was not an Ionian city, and there was neither spoken or written an Ionian dialect; but from the little known of its history, it results that many Greek cities had aided in peopling it, especially from the appeal that Battos II addressed to all Hellenes. This very mixed foundation must have yielded without resistance to the ascendancy of Ionian genius. From There came the Minyans that founded Cyrene. Then by the study of archaic sculpture and ceramics, we have recognized that since Rhodes, Thera and its neighbor Melos were dependances and like vassals of I Ionia in all that concerns art.[1] Even the situation of Cyrene predestined it to suffer that influence. The Greek city that was nearest, the only one that its vessels could reach in all seasons without risking themselves in the open sea, was that Naucratis where reigned the gods anf arts of Ionia.

Note 1.p.506. From Naucratis or perhaps from Miletus, Samos or Phocea, Ionians certainly came to establish themselves at Cyrene, attracted by the rapid increase of its prosperity.

Their industry was favored and stimulated by the rise of a maritime commerce, that advantageously placed its products in the markets of Etruria. There is explained the vogue that these p pretty cups enjoyed among the Etruscans. By their general form, they cause one to think of certain Mycenian cups;[2] but the proportion is here happier between the foot of the vase and the vessel. That is less deep with more breadth, and spreads in a more beautiful curve. There is more elegance in the design and in the attachement of the handles. One must subscribe to a judgement given on the pieces of this series by a refined connoisseur. "In a general way can one say that these Cyrenean cups, by the perfection of their tecnnics, the polish of the clay a and its admirable lightness, the minute incisions and the splendor of the colors, the importance and the number of the historical and mythological subjects, represent the climax of Ionian fabrication. These are masterpieces of the school of archaic painting on a white ground." [3]

Note 1.p.506. Histoire de l'Art. Vol. VIII, p. 318-320.

Note 2.p.506. The same. Vol. VI. Figs. 476, 492.

Note 3.p. O.. Pottier. Catalogue, p. 530. See by the same, Documents ceramiques du musee du Louvre (Bull. Corr. Hell. 1893, p. 225-240).

By recent discoveries in Laconia, men have been able to contest with the workshops of Cyrene the merit of having produced these pretty cups and of having made them the fashion among I Italian patrons of Greek ceramists. What caused the proposition thus made to dispossess the Cyreneans, and that has seemed to some archaeologists to justify this, is one of the most curious results produced by the excavations that the English School of Athens has undernaken on the site of Sparta, and which for several years it has pursued there with much perseverance, method and success.[1] In several campaigns it has explored the entire precinct of Artemis Orthia, where two temples succeeded each other, one being destroyed about the year 600 to be replaced by a more important edifice.

Note 1.p.507. Annual of British School. Vols. XII,XIII, XIV.

From trenches dug at that point have been taken shovelfuls of clay fragments, which there as at Naucratis represent the fragments of painted vases, which during several centuries the piety of the faithful had consecrated in the sauctuary. Reduced

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the rearer, that the motive of the decoration could be recogni-
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ements revealed in a pottery, which strongly resembles that which we have credited to Cyrene.[2] There are found some of the
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ve characteristics of the species, in the vases that we attr
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ments have been gathered at Sparta, at least in all that appe-
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a coating of white or of a yellowish tone. On all parts, the
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plain red, frequently of a very vivid tone. Finally at Sparta is found one of those motives of ornament most frequently employed by the workmen, that we have believed Cyrenean, that garland in which are connected by a slight thread the pomegranates, which are surmounted by this little line in the shape, that recalls the pistils of the flower (Fig. 242).[3] Other motives are common to the two series. Such are the lotus buds and flowers, the palmettes, whose design is nearly the same in the two ceramics, and finally such are the stars with three or four branches, the triangular tongues that radiate around the foot of the vases, or from the centre to circumference on the cups. Finally, such is the band of lozenges with great knots at the intersection of the cords; but aside from the pomegranates in series, all these motives have appeared or will appear to us in the work of most workshops, whose products
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Yet the analogy is not contestable, and English archaeology have noted and insisted on it; but perhaps they were too much in a hurry to conclude that the vases heretofore attrib-
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them into Egypt and Etruria.[1]

into bits as were these vases, which were broken in the holes in which they were buried, when it was necessary to find space for the new offerings. There were pieces sufficiently large in the number, that the motive of the decoration could be recovered. They even came to restore some little vases and also one or two cups. What the examination and combination of these fragments revealed is a pottery, which strongly resembles that which we have credited to Cyrene.[2] There are found some of the traits which the ceramographs have mentioned as the distinctive characteristics of the species, in the vases that do honor to Cyrenean fabrication. As in those, in all vases whose fragments have been gathered at Sparta, at least in all that appear to date in the archaic age, the decoration was applied on a coating of white or of a yellowish tone. On all parts, the black of ornaments or figures are the same retouches of a purplish red, frequently of a very vivid tone. Finally at Sparta is found one of those motives of ornament most frequently employed by the workman, that we have believed Cyrenean, that garland in which are connected by a slight thread the pomegranates, which are surmounted by this little line in fan shape, that recalls the pistils of the flower (Fig. 242).[3] Other motives are common to the two series. Such are the lotus buds and flowers, the palmatiums, whose design is nearly the same in t the two ceramics, and finally such are the sigmas with three or four branches, the triangular tongues that radiate around the foot of the vases, or from the centre to circumference on the cups. Finally, such is the band of lozenges with great knots at the intersection of the cords; but aside from the pomegranates in strings, all these motives have appeared or will appear to us in the work of most workshops, whose products seem to us to bear the impress of the taste and style of the Ionian potters.

Note 2.p.507.Annual. Vol. XIV, p. 30-47. J. P. Droop. Pottery.
Note 3.p.507.The same. Vol. XIV. Pl. IV.

Yet the analogy is not contestable, and English archaeologists have noted and insisted on it; but perhaps they were too m much in a hurry to conclude that the vases heretofore attributed to Cyrene came from Laconian workshops, that had exported them into Egypt and Etruria.[1]

Note 1.p.508. Droop. Dates of the vases called Cyrenaic.(Jour. Hell. Studies. Vol. XXX. Pl.1-34).

Before accepting these conclusions, it would seem that a first hypothesis is to be considered. Did not Laconia obtain its painted pottery from the market of Cyrene?

Crete and Africa look on the ports of Laconia. We have had occasion to indicate how by that way the influence of Egyptian models could make themselves most felt by the most ancient sculptors of the Peloponessus;[2] but for ceramics there is no reason to stop with this conjecture. The explorers of the sanctuary of Artemis Orthia, in gathering the fragments that they found arranged in the earth in stratified layers, had the feeling that each of those layers corresponded to one of the phases of an organic evolution, of the gradual development of a local ceramics. This first impression did not deceive those who said they had proved it. What attests it is the remarkable unity of appearance that characterizes the products of this ceramics. From the most ancient of the fragments collected on this field to those, which from the position they occupied in the earth as according to the taste of their decoration, seemed to be most recent, all these fragments evidence the persistence of the same traditions of the workshop, traditions that ascend very early and scarcely disappear with the industry of the painted vase. At least from the 7 th centurw, from the time that plant ornament and the living figure commence to claim a place in t the geometric style, that reigns everywhere else in Greece, the Laconian potter was accustomed to cover his clay with a l light coating, and even when the examples of Corinthians and Attics had tended to cause him to abandon this practice, he remained obstinately faithful to it; he renounced it only at the last extremity. In this production that had such a long d duration, that it is thought possible to distinguish even four periods; but the transitions from one to another are nearly i insensible, and even those that have desired to establish those divisions are often embarrassed to assign a certain vase to one rather than to another of these classes. There is nothing there not easily explained, if in the remains of this ceramics is r recognized the product of the workshops of the country, where the recipes and secrets of the trade are transmitted from father to son; but the residue of those offerings thus brought to

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brought from outside the vases which they gave to the patrons
of the city. [illegible]
uniformity of fabrication verified by the observers, and the
fragments would not be ready to allow themselves to be [illegible]
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tempted to form, according to the indications of the ground,
more than one vase could. In the collection made of these
fragments, one was unable to note incongruities, by which would
be betrayed the intrusion of vases, which at various times had
been brought by the devotees of Artemis from foreign workshops,
each of which had its special technique.

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We believe that one cannot avoid the necessity of entering
at least partly into the views which the result of the examina-
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seems demonstrated by these excavations that Sparta was very
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it, they have sometimes represented Sparta as almost a barbar-
ous city, which by a difference from the other Greek cities c
continued foreign to the least and to the sentiment of art. Th-
ere was a prejudice that has not resisted a more attentive st-
udy of the texts and the discovery of sculptured monuments of
every kind, that since commenced the era of excavations have
left the soil of Laconia in great numbers. As after Pausanias
have been attested by the silent remains of some of the edifi-
ces mentioned in his third book, the Spartans loved beautiful
architecture. If none of the illustrious masters of statuary
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arts had in the 6 th century sculptors, pupils of the Cretans
Dipoinos and Skyllis, that in their time enjoyed a certain
fame.[1] [illegible]
steles have allowed us to form an idea of what must have be
the style of the works attributed to these sculptors, Hegylt
and Theocles, Dontas and Daylidonas.[2] In such conditions, ho-
had men supposed that alone of all the Greeks, the Spartans

the temple during several consecutive centuries would have presented an entirely different appearance, if the Laconians had brought from outside the vases which they gave to the patroness of the city. In this case, there would not have been found this uniforimty of fabrication verified by the observers, and these fragments would not be ready to allow themselves to be grouped in a series based on the chronological order. What men had attempted to form, according to the indications of the ground, more than one break would cut. In the collection made of these fragments, one was unable to note incongruities, by which would be betrayed the intrusion of vases, which at various times had been brought by the devotees of Artemis from foreign workshops, each of which had its special technics.

Note 2.p.508. Histoire de l'Art. Vol. VIII. p. 428.

We believe that one cannot avoid the necessity of entering at least partly into the views which the result of the excavations of Sparta have suggested to English archaeologists. It seems demonstrated by these excavations that Sparta had very early and retained very late a ceramic industry sufficiently active, perhaps of itself alone, for the needs of local supply. There is a fact which is not surprising to us. When the moderns began to study the history od Greece and attempted to write it, they have sometimes represented Sparta as almost a barbarous city, which by a difference from the other Greek cities c continued foreign to the last and to the sentiment of art. There was a prejudice that has not resisted a more attentive study of the texts and the discovery of sculptured monuments of every kind, that since commenced the era of excavations have left the soil of Laconia in great numbers. As after Pausanias have been attested by the slight remains of some of the edifices mentioned in his third book, the Spartans loved beautiful architecture. If none of the illustrious masters of statuary of the 5 th and 4 th centuries was a native of Sparta, yet Sparta had in the 6 th century sculptors, pupils of the Cretans Dipoinos and Skyllis, that in their time enjoyed a certain fame.[1] Cut in Laconian marble, the reliefs of many funerary steles have allowed us to form an idea of what must have been the style of the works attributed to those sculptors, Hegylos and Theocles, Dontas and Daykleidas.[2] In such conditions, how had men supposed that alone of all the Greeks, the Spartans

could be indifferent to the charm of painting, when everywhere around them an inventive and rapid brush was laid on the clay of which were made the ordinary vases, thus hiding the poverty of the material beneath the ornamentation of a rich and varied decoration? It was then right, even before being able to furnish proof, to affirm that Sparta must have had, like its native sculptors that wrought the rocks of Paumon or Taygetus, i its potters that fashioned and worked the clay of the valley of the Eurotas. The proof is now made by the excavations of t the English School.

Note 1.p.510. Histoire de l'Art. Vol. VIII, p. 433.

Note 2.p.510. The same. pa. 438-440; Figs. 213-223.

The historian could not be surprised then to see those excavations prove to him the existence of a Laconian ceramics, and inform him that the activity of that fabrication was continued for many years; but he could not prevent himself from experiensink some surprise at first sight, when he must verify that t this ceramics, althougr born in Dorian lands and had there accomplished its entire evolution, was connected in its general character to the family of Ionian ceramics. He also recovered from that surprise very quickly, however little it recalled all the occasions that he had for showing what had been the expansive force of Ionian genius, during the entire duration of what can be termed the infancy and youth of Greece, how then this genius radiated in all directions, much beyond the limits of the territory inhabited by the sons of the Ionian race, how it made felt thn ascendant of its precocious maturitn, of its thought, its language and its art, not only by its nearest neighbors, but even by the group of cities that an entire extent of the sea separated from Ionia proper.

To speak here only of Laconia, we know that a famous Ionian sculptor, Bathycles of Magnesia, came about the middle of the 6 th century to establish himself at Sparta for several years, so as to work there on the construction and decoration of the throne of Apollo of Amyclea.[3] He was accompanied by the choice of his practicians, of those who cut the marble, that cast bronze, and those who raised and chased metal. Potters with their painter assistants could join that art colony. While Bathycles ard his apprentices initiated the Peloponessians in the refinements of an already wise sculpture and goldsmith's work, those

Miletan or Rhodian potters had set up their wheels at Sparta; they had taught the artisans of the country to treat and decorate clay by the methods that had made the success of the workshops of eastern Greece.

Note 3.p.510. Histoire de l'Art. Vol. VIII, p.396-398.

It is of little importance how the processes and motives familiar to Ionian ceramists were introduced and acclimated then in Laconia, on the occasion of the call addressed to Bathycles, or whether they came earlier by some other way. What remains certain is, that the Laconian ceramics, restored to us by the remains of the sanctuary of Artemis Orthia, took its models from the types created by the potters of Asian Greece, and that the ceramics to which is attached the name of Cyrene was inspired by the same examples and took the same types; but has one a reason to infer from that parity of origin that these t two ceramics formed but one? For our own part, we do not believe it. Very serious reasons appear to us to reject the hypothesis, according to which it was Laconian workshops which supplied to foreign patrons all those light cups with a white coating, that have been grouped under the name of Cyrenean.

A primary reason is, that at least one and perhaps two of t these cups are decorated by paintings whose theme confirms the hypothesis generally accepted. One can discuss the ingenious interpretation proposed on the subject of a cup, unfortunately incomplete, of the British Museum, on which it is believed has been recognized Battos the founder and the nymph Kyrene.[1] This interpretation seems to us very plausible; but in any case there is the so-called cup of Arcesilas. The peculiarity of the painting that decorates the interior seems to us a true work of the workshop, one of those marks that frequently on faiences or modern porcelains give the name of the city, where is found the workshop from which came the piece.

Note 1.p.511. See above, p. 498-499.

Indeed one does not see how there could have come to the mind of the Laconian potter the strange idea of seeking the theme of his painting in one of the royal ceremonies, which on certain days of the year called and amused the multitude of loafers on the quays of the great African port. If by the impossible, he had taken a fancy to imagine that scene from a tale told a him by some sailor, there would surely not have been included

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panting [illegible] the [illegible] of the king and the [illegible]

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place by the curious and experienced eye of a witness, whom

his profession had taught to fix a rapid sketch of the [illegible]

of every action and of every group, which he hoped to use to

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the calls [illegible], the words pronounced in the hole at the

time of handling the sacks of silphium, of terms where at least one, that of silphion, was foreign to the Greek language [illegible]

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city that maintained close relations with the ports of the [illegible]

[illegible] If this painting were executed at Cyrene, nothing is more natural; but it would always remain difficult to explain, [illegible]

[illegible] [illegible] these, and if by chance he was informed of it, how he could be able [illegible]

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The argument [illegible] by the [illegible] of the cup of Arcesilas seems to us sufficient to solve the question of origin for the vases of various forms, that by their mode of fabrication announce themselves as the products of the group of documents from which came the cup, which seems to us to furnish the solution of the problem; but there is no less interest in presenting here certain accessory considerations, that come to the support of the conclusions that we have made. What makes one result of the English excavations out of doubt is, that Laconia very early had a ceramic industry, whose activity was [illegible]

[illegible] fashion; but what nothing indicates to us and that we refuse to believe before the proof of it is made, is that this Laconian workshop labored for export, and that it sent its products on the one hand to Naucratis, and on the other to Etruria. If like so many Greeks of pure blood, the Spartans like all other [illegible]

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well as for poetry and music, Sparta, where all energies of the State tended to military effort and the power that it procured, was never an industrial and commercial city. At [illegible]

in the version presented to him many accessories, such as the panther beneath the throne of the king and the ape climbing t the rigging that give the impression of details seized at the place by the curious and experienced eye of a witness, whom his profession had taught to fix a rapid sketch of the image of every action anf of ewery group, which he hoped to use to give to his pottery the airtaction of the unexpected anf of variety. Further, who but an inhabitant of Cyrene could know the calls that echoed, the words pronounced in the mole at the time of handling the sacks of silphium, of terms where at least one, that of silphomachos was foreign to the Greek language by one of its elements, would it have been understood outside a city that maintained close relations with the ports of the Egyptian Delta? If this painting were executed at Cyrene, nothing is more natural; but it would always remain difficult to explain, how at another centre of fabrication, a painter could have imagined choosing this theme, and if by chance he was informed of it, how he could be able in a measure to treat it like the author of the painting in question.

The argument furnished by the existence of the cup of Arcesilas appears to us sufficient to solve the question of origin for the vases of various forms, that by their mode of fabrication announce themselves as the products of the group of workshops from which came the cup, which seems to us to furnish t the solution of the problem; but there is no less interest in presenting here certain accessory considerations, that come to the support of the conclusions that we have made. What makes the result of the English excavations out of doubt is, that Laconia very early had a ceramic industry, whose activity was prolonged until the time that the painted vases passed out of fashion; but what nothing indicates to us and that we refuse to believe before the proof of it is made, is that this Laconian workshop labored for export, and that it sent its products on the one hand to Nacuratis, and on the other to Etruria. If like so many Greeks of pure blood, the Spartans like all other sons of the same race, had a taste for the arts of design as well as for poetry and music, Sparta, where all energies of t the State tended to military effort and the power that it procured, was never an industrial and commercial city. At certain

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arsenal; but in the ancient authors is not found an allu-
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on or to leave Gythium, barks had to double cape Taenarum that
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squalls, that from the summits of Taygetus beat down on the
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Until the Roman conquest, Greece had only bad mule paths [illegible] the [illegible] of the mountains, which separated its various States from each other. Fifty years since, when I made my [illegible] before the [illegible] set himself to work. I remember the trouble that we had in the first days of spring in passing from Arcadia, still white with snow, by the defiles of [illegible], the plain of Sparta, which began to be covered by violets and narcissuses. On several occasions, our horses slipped on the narrow trails that the winter rains had cut in places, and our baggage rolled down the slopes of ravines. Can you see light clay cups exposed to those accidents? painted vases did not allow themselves to be loaded on pack-saddles like grain or olives; they would not have reached their destination. On the contrary, with a little skill, one could stow them in straw in the holds of the galleys. Several of these votive plaques, of which we have given specimens, represent Corinthian barks loaded with vessels made in the workshops of the isthmus (fig. 107). Draw up a list of Greek cities that have had a truly flourishing industry, and that enriched themselves by sending to a distance the products of their kilns; you will find only maritime cities to inscribe there. These will first be the cities of the Ionian coast and of the neighboring islands. They will be Chalcis, Corinth and Athens. With the movement of a port from which went in all directions the bales of silphium and other wares drawn from the African interior, Cyrene was in the best condition that its artisans could find profit in making elegant vases, which could be taken to the quay and carefully packed by the captains whose ships served the markets of Italy. We further have by another order of monuments the proof that Cyrene practised in all times with activity and success the

times it had a war navy, which had at Gythium its harbor and arsenal; but in the ancient authors is not found an allusion to a commerce of importance, carried on by this means. To reach or to leave Gythium, barks had to double cape Taenarum that was feared by navigators in all seasons for the violent wind squalls, that from the summits of Taygetus beat down on the sea. Now it is important not to forget, that by sea alone could be transported vases.

Until the Roman conquest, Greece had only bad mule paths for crossing the tops of the mountains, which separated its various States from each other. Fifty years since, when I made my first journey in Peloponessus, the condition of the roads there scarcely differed from what it must have been in antiquity, b before the Latin engineer set himself to work. I remember the trouble that we had in the first days of spring in passing from Arcadia, still white with snow, by the defiles of Menale, into the plain of Sparta, which began to be covered by violets and narcissuses. On several occasions, our horses slipped on the narrow trails that the winter rains had cut iu places, and our baggage rolled down the slopes of ravines. Can you see light clay cups exposed to those accidents? painted vases did not allow themselves to be loaded on pack-saddles like grain or o olives; they would not have reached their destination. On the contrary, wtth a little skill, one could stow them in straw in the holds of the galleys. Several of these votive plaques, of which we have given specimens, represent Corinthian barks loaded with vessels made in the workshops of the isthmus (Fig. 107). Draw up a list of Greek cities that have had a truly flourishing industry, and that enriched themselves by sending to a distance the products of their kilns; you will find only maritime cities to inscribe there. These will first be the cities of the Ionian coast and of the neighboring islands. They will be Chalcis, Corinth and Athens. With the movement of a port from which went in all directions the bales of silphium and o other wares drawn from the African interior, Cyrene was in the best condition that its artisans could find profit in making elegant vases, which could be taken to the quay and carefully packed by the captains whose ships served the markets of Italy. We further have by another order of monuments the proof that Cyrene practised in all times with activity and success the

figurines of terra cotta, which count among the most elegant that Greek coroplaths modeled. The Louvre possesses an excellent series of these statuettes that came to it from Cyrenaica. Sparta has yielded nothing similar.

For all these motives, we refuse to accept the theory of English archaeologists; but we at least owe them to record their discovery and to mention the ceramics, unknown till then, which they had opportunity to exhume and that they have described. In the state in which both hands and pressure has pulverized them, it could not appear to merit much attention, for we know nothing of the themes that it treated, and we are ignorant how the figure was drawn; but what is particularly interesting in this ceramics is, that again we take into account the act that virtue always in action, that conquering energy of Ionian intelligence, which subjects to its ascendancy even many of those, that it seems must remove from it the entirety of their atavistic traditions. The Dorians of Sparta caused their ephebes to learn and sing, accompanied by the Phrygian flute, the elegies of Tyrteus, the imitator of Callinos of Ephesus, those elegies where all, metre and language, had an Ionian coloring. The phiales and oenochoes employed in offering the libation to their Artemis Orthia reproduced the forms, tones and decorations of the vases used for the same purpose in Ionia by the worshippers of Artemis of Ephesus and of Apollo of Miletus.

8. Ionian Vases of unknown origin and found in Italy.

If the hypothesis that we have joined be accepted, it is necessary to place the workshops of Cyrene on the list, too brief in our opinion, of Ionian workshops known to us by the result of excavations. The workshops of Cyrene take their place there after those of Daphnae, Naucratis, Rhodes and the Cyclades. T They represent there an art which especially by the nature of the subjects treated there by the ceramist painter, is more advanced than even that of Rhodes and of Melos.

The cups that we have attributed to Cyrene were all collected outside Cyrenaica, some at Naucratis and most in Italy. If we have believed it possible to assign them a country, this is b because on two or three of them, the choice of the theme of the decoration has seemed to us equivalent to a certificate of origin. There has been gathered in the cemeteries of Etruria and of Campania a number of other vases, which the most competent

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fluence of their taste and have applied themselves to imitate their technics. On many of these vases the Ionian character of the painting is no less frankly marked than on the cups of Cyrene; but there is a difference; in the paintings that decorate these hydrias, these amphoras and cups, we find no indepen-
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nounce the name of a workshop to which he thinks could be at-
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es in question. In these conditions, all that can be proposed is to distinguish and to define these different groups of vases like Ionian, is to seek those most strongly tinged by Ionian,
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lential on the whole, to the spirit and traditions of Attican Greece, yet has used details borrowed from other workshops.

The Ionian vases found in Italy all date, with very few exceptions, from the last period of the development of the pottery to which they belong. This explains the boldness that we must recognize if at a certain time the Ionian potter without other than his originality was undertaken to introduce certain changes in his processes of execution, he so decided under the stimulus of competition. From the end of the 7 th century, the vases that he exported for the markets in Greece and across had to dispute there the favor of the patron with those that the active industry of Corinth produced by thousands, and that its powerful navy retailed in the entire Mediterranean; it was also necessary for them to count with those vases with black
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and skilful as arranging great compositions, produced the masterpieces that they produced a little later under the reign of the colored figure.

Not to desert the contest, they applied themselves then to profit by the examples given to them by their enterprising rivals; they resolved to steal from them some of the trade secrets which had made their success. Perhaps they were struck
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judges agree to recognize as also the work of Ionian ceramists, or at least that of artisans who learned the trade at the school of the master potters of Ionia, which have suffered the influence of their taste and have applied themselves to imitate their technics. On many of these vases the Ionian character of the painting is no less frankly marked than on the cups of Cyrene; but there is a difference; in the paintings that decorate these hydrias, these amphoras and cups, we find no indication that orientates the historian, which authorizes him te pronounce the name of a workshop to which he thinks could be attributed by conjecture the paternity of a certain group of vases in question. In these conditions, all that can be proposed is to distinguish and to define these different groups of vases like Ionian, is to seek thosemost strongly tinged by Ionism, and in what measure everywhere the potter, while remaining faithful on the whole, to the spirit and traditions of Asian Greece, yet has made certain borrowings from other workshops.

The Ionian vases found in Italy all date, with very few exceptions, from the last period of the development of the school to which they belong. This explains the borrowings that we have mentioneda If at a certain time the Ionian potter without dropping his originality has undertaken to introduce certain changes in his processes of execution, he so decided under the stimulus of competition. From the end of the 7 th century, the vases that he executed for the markets in Greece and abroad n had to dispute there the favor of the patron with those that the active industry of Corinth produced by thousands, and that its powerful navy retailed in the entire Mediterranean; it was also necessary for them to count with those vases with black figures by which the Attic potters, already very firm designers and skilful an arranginm great compositions, preluded the masterpieces that tehey produced a little later under the reign of the colored figure.

Not to desert the contest, they applied themselves then to profit by the examples given to them by their enterprising rivals; they resolved to steal from them some of the trade secrets which had made their success. Perhaps they were struck by admiration aroused by works such as the cratera of Ergotimos and of Clitias (Francois vase), where the multiplicity of the scenes and persons strongly interested the spectator, in whom

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when they took the trouble to translate them into images, at least living on the corner of the Hellenic world, and their curiosity was exercised in seizing the sense of all these figures, which they saw scattered in profusion on the objects of luxury, that they demanded from the art industries of Greece. for sale, it was important to be able to promise and to [illegible] ure for the purchaser the pleasure that the Etruscan like the Greek found in this sort of representations, in this pictures-

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ite, which they had from this interpretation that had seized the Tuscan princes and nobles for the painted pottery of Greece. For this purpose they also undertook to [illegible]

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of gods and of heroes, comprising as many persons as there we on the average in the pictures on the Attic vases.

On vases from Corinth and those of Athens, in those paintings

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ention to add to the figures legends that gave the names of t the principal actors in the scene. Many Greeks whose infancy

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these legends; but they were very often very welcome to strangers, that had only a very vague knowledge of the attributes by which the Greek gods were distinguished from each other, a and who did not know by heart the adventures that local traditions and the epic songs gave to so many heroines and heroes. While the Italians were left to their own inspirations, they h had not felt the need of these explanatory legends; but they ended by adopting their use, so as not to allow their competitors to have any advantage over them. Among so many vases, pieces of ... pottery, that have been furnished to us by the r

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in all recognized but a single one, a Rhodian plate, on which the persons are designated by their names (Fig. 221). It is e entirely otherwise for vases assumed to be Rhodian that came

[illegible]

it revived the memory, in a long series of pictures, all those beautiful tales of the pnets, that had enchanted the youth of Greece, and which commenced to amuse foreigners themselves, when they took the trouble to translate them into images, at least living on the boader of the Hellenic world, and whose curiosity was exercised in seizing the sense of all these figures, which they saw scattered in profusion on the objects of luxury, that they demanded from the art industries of Greece. For sale, it was important to be able to promise aud to procure for the purchaser the pleasure that the Etruscan like the Greek found in this sort of representations, in this picturesque illustration of the myth. This was understood by the ceramists of Ionia, who held to retain for their part the fine profits, which they had from this infatuation that had seized the Tuscan princes and nobles for the painted pottery of Greece. For this purpose they also undertook to treat what may be termed great subjects. On many hydrias and inside some cups, they placed paintings with themes taken from the fabulous history of gods and of heros, comprising as many persons as there were on the average in the paintings on the Attic vases.

On vases from Corinth and those of Athens, in those paintings with mythological subjects, the painter usually took the precaution to add to the figures degends that gave the names of t the principal actors in the scene. Many Greeks whose infaucy had been amused by these fables, could rigorously have omitted these legends; but they were very often very welcome to strangers, that had only a very vague knowledge of the attributes by which the Greek gods were distinguished from each other, a and who did not know by heart the adventures that local traditions aud the epic songs gave to so mauy heroines and heros. while the Ionians were left to their own inspirations, they n had not felt the need of those explanatory legends; but they ended by adopting their use, so as not to allow their competitors to take any advantage over them. Among so many vases, complete or fragmentary, that have been furnished to us by the r ruins of the cities of Asian Greece and of the islands, we have in all recognized but a single one, a Rhodian plate, on which the persons are designated by their names (Fig. 221). It is e entirely otherwise for vases assumed to be Rhodian that came from the cemeteries of Italy. Doubtless they do not present to

us all the legends of that kind; but these are not rare. We h have already found them in number on the cup of Arcesilas (Pl. XXI). We shall find them on one of the most curious monuments of this art, on the cup of Phineus and on other vases of different types.

Further, if the Ionian ceramists have conformed to the taste of the day, as to the choice of themes and the mode of presentation, the shape itself of their vases has not suffered the least change. If there was a procedure to which they appeared attached by long practice, this was indeed the use of that light coating on which was applied their decoratiou. We have seen the potters of Cyrene and of Sparta still remain faithful to this technics; but the potter had renounced it in the workshops from which came the vases of which it remains to us to speak. The effect produled by the white coating had a vivid charm; b but in using them it was necessary to remember that these coatings adhered badly to the clay and easily scaled off. This inconvenience must have become still more apparent from the day when the potter no longer worked only in view of the local market. Condemned to long journeys that exposed them to much friction, the vases risked losing on the route a part of the light coating, whose freshness made its charm. They had the defect of those fabrics, whose vivid but very fleeting colors pass a away too quickly. The patrons whom it was necessary to obtain had perhaps allowed it to be seen by a decrease of orders, that to this too rapidly fading charm they preferred the stability of the tones of those Attic vases, whose beautiful black detached itself so well and was so firm on the red ground of lustrous clay.

Etruscan tombs have furnished many of these vases, which by the absence of all coating, for whose color is substituted that of the clay passed through the kiln, depend on the technics of the Corinthian and Attic workshops, but on which the decoration no les retained a frankly Ionian character. Of all these vases, the most interesting are those called the hydrias of Caere, b because these hydriau have all been collected in the cemetery of that city. About twenty of them are counted, which present sufficient common traits, that one is believed able to regard them as having come from the same workshop. One or two will suffice to show what distinguishes them and what makes their

originailtity.[1]

Note 1.p.518. The list drawn up by Pottier in 1892, the last given as far as I know, comprises 18 numbers (Les sarcophages de Clazomenes et les hydrias de Caere, in Bull. Corr. Hell. V Vol. XVI, p. 241-262). This Article gives the entire preceding bibliography.

Among other hydrias of this kind, the Louvre possesses one whose decoration is especially curious. The ornamental motives there are made familiar to us by the sarcophaguses of Clazomenes and the entire Ionian ceramics (Fig. 250). This is a fret on the lip, on the neck being a great star with 8 rays, on the shoulder a garland of leaves and of ivy berries, with divergent tongues around the attachment of the handles. Toward the f foot of the vase is a band on which alternate palmatiums and lotus flowers, then below are radiating points that rise with the vase and lanceolate leaves which descend to the ground.[2] On the body are two subjects; on one side is an ephebe on horseback who pursues two spotted deer (Fig. 251), on the other are two winged bulls running(Fig. 252). With touches of white placed on the ground or on the black are executed the nude parts of the figures, the spots on the skins of the deer and a band on the wings of the bulls.

Note 2.p.518. On this ornament, so frequently employed in t this place by Ionian painters, see Note on the origin of double rays as an ornament.(Appendix II to Notes on Amasis by Karo in Jour. Hell. Studies. 1889. p.163-164.

Where did the painter take this hunting scene so presented? I know nothing in epic and lyric poetry, nor in the historians, that gives reason to think that this kind of sport was in the habits, either of the Achaian kings of the heroic age or of t their descendants, the chiefs of the nobles of the Greek cities of Asia Minor. Further, neither European nor Asian Greece, both entirely of mountains and narrow valleys, had the wide plains which alone could lend themselves to those long and foolish rides. These assume the vast uniform areas that border the Euphrates and Tigris. There the kings of Chaldea and of A Assyria were invited by nature itself to the ground to seek t these diversions; mounted on a chariot, near the driver who h held the reins, or galloping on a horse, they pushed forward and pierced with arrows the wold beasts that swarmed in the s

[illegible]

however, as perhaps also certain artistic details, by which the Ionian painter must have been inspired, when he traced on the clay scenes of that kind; he did not have opportunity to be present in Ionia at such hunts. What announces that borrowing even better than the painting of the hydria is the painting of a tent, that forms a part of the decoration of one of the most beautiful sarcophagi of Clazomenae (Fig. 467). There one sees three deer, whose coats are spotted with white as on the [illegible]. [illegible] they are two in number. He that presses nearest the game [illegible] his head, while he brandishes a long spear in the right. Behind him is a horseman, that as if he feared to pass the chariot, seems to hold back strongly to retain the spirit of his restive mount. A dog runs beneath the team. Thus complete, these was one of the favorite themes of Assyrian sculpture. On the hydria, where the painter had at his disposal only a more restricted ground, there is a beast and a hunter less, but although simplified, it is again the theme whose exotic source we have indicated.

Same mark of origin in the group that decorates the opposite [illegible] Asia in which we find them everywhere, in the ornamentation of textiles and on engraved stones.[1]

1 [illegible] Figs. 141, 297, 381, 443, 448.

One would have difficulty to explain why Greek potters working in Asia or even in European Greece should have made such con- [illegible] all difficulty disappears, if we admit that the vases described above are the work of an Ionian potter, although discovered in Etruria. If refusing to admit that Chaldeo-Assyrian sculpture furnished models to the growing Greek sculpture, and that it exerted a decisive influence on the formation of the style, we have stated by what multiple ways came to the markets of

spiny thickets of the desert or in the rose gardens of the inundated mountains.

Note 1.p. 19. Histoire de l'Art. Vol. II, Figs. 5, 264, 270, 316, 3.1.

From royal hunts represented in the palaces of Babylon and Nineveh, as perhaps also certain Hittite reliefs, by which the Ionian painter must have been inspired, when he traced on the clay scenes of that kind; he did not have opportunity to be present in Ionia at such hunts. What announces that borrowing even better than the painting of the hydria is the painting of a hunt, that forms a part of the decoration of one of the most beautiful sarcophaguses of Clazomenes (Fig. 127). There are s seen three deer, whose coats are spotted with white as on the hydria. They flee before the hunters at their greatest speed. They are two in number. He that presses nearest the game stands on a chariot drawn by two horses. He holds the reins in the l left hand, while he brandishes a long spear in the right. Behind him is a horseman, that as if he feared to pass the chariot, seems to hold back strongly to retain the spirit of his half rearing mount. A dog runs beneath the team. When complete, there was one of the favorite themes of Assyrian sculpture. On the hydria, where the painter had at his disposal only a more restricted ground, there is a beast and a hunter less, but although simplified, it is again the theme whose exotic source we have indicated.

Same mark of origin in the group that decorates the opposite side. These two winged bulls came in a direct line from western Asia in which we find them everywhere, in the ornamentation of fabrics and on engraved stones.[1]

Note 1.p. 20. Histoire de l'Art. Vol. II, Pl. XIV; Figs. 139, 141, 277, 331, 448, 449.

One would have difficulty to explain why ceramists workiug in Asian or even in European Greece should have made such borrowings from the repertory of Chaldeo-Assyrian artists; but all difficulty disappears, if he admits that the vases described above are the work of an Ionian potter, although discovered in Etruria. In refusing to admit that Chaldeo-Assyrian sculpture furnished models to the growing Greek sculpture, and that it exerted a sensible influence on the formation of the style, we have stated by what multiple ways came to the markets of

Tombs the products of the industrial arts of western Asia, ma- [illegible] embroidered fabrics. We have indicated how all these richly de- corated objects must have furnished to the Ionian decorators [illegible] the stag or attack the lion.[3] It may be said on every one is [illegible][4] In the decoration of this imagery of metal the Ionian painter [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

art by painters of vases of this series may be cited the fol- [illegible]

See Histoire de l'Art. Vol. II, Fig. 408).

If the workshops from which came the so-called hydrias of Caere, men were ignorant of the types created by the art of [illegible], other pieces of the same series prove that they had a more intimate and familiar knowledge of Egypt, its customs and costumes, and of the character of the traits of its people. What particularly gives that impression is the hydria called the vase of Busiris (Fig. 255).

[illegible] later developed at Athens by the satiric drama, that is [illegible]ted with the name of that legendary Pharoah.[1] Busiris was said to be a king of Egypt, who by order of an oracle sacrificed to his gods all strangers that tempests cast on the shores of the Delta. He continued those massacres until the time when Hercules, conducted into Africa by the order that he received to go gather the golden apples of the Hesperides, was seized by the guards of the king. They led him to death when he broke his bonds and slew Busiris. This scene is represented in the [illegible] les occupies nearly the middle of the principal face. (Pl. XXI.) With his short and curly hair he has a thick beard. His form is heavy and robust. In the first rush of his reconquered lib-

Ionia the products of the industrial arts of western Asia, metal cups, carved ivories, cones and cylinders, tapestries and embroidered fabrics. We have indicated how all these richly ornamented objects must have farnished to the Ionian decorator more than one motive, more than one type, of which he could n not fail to make use.[2] On the bronze or silver cups that particularly Phoenicia supplied are frequently represented these horsemen aud chariots, that with bow or lance in hand pursue the stag or attack the lion.[3] It may be said on every one is found winged monsters, geniuses, sphynxes, griffins, etc. [4] In the chasings of this imagery of metal the Ionian painter c could find all the elements of the decoration of his hydria.[5]

Note 2.p.520. Histoire de l'Art. Vol. VIII, p.621-724.

Note 3.p.520. The same. Vol. III, Figs. 543, 544.

Note 4.p.520. The same. Vol. III. Figs.546,547,548,550,552.

Note 5.p.520. As examples of motives borrowed from Asian art by painters of vases of this series may be cited the following:- Two eagles each seizing a hare(Louvre, Hall E, 698. See Histoire de l'Art. Vol. II, Fig. 409).

If the workshops from which came the so-called hydrias of C Caere, men were not ignorant of the types created by the art of Asia, other pieces of the same series prove that they had a m more intimate and familiar knowledge of Egypt, its customs and costumes, and of the character of the traits of its people. W What particularly gives that impression is the hydria called the vase of Busiris (Fig. 253).

The tale is known, doubtless born in the Ionian world and l later developed at Athens by the satiric drama, that is connected with the name of that legendary Pharoah.[1] Busiris was said to be a king of Egypt, who by order of an oracle sacrificed to his gods all strangers that tempests cast on the shores of the Delta. He continued those massacres until the time when Hercules, conducted into Africa by the order that he received to go and gather the golden apples of the Hesperides, was seized by the guards of the king. They led him to death when he broke h his bonds and slew Busiris. This scene is represented in the circular field of the body between two enclosing bands. Hercules occupies nearly the middle of the principal face. (Pl. XXI). With his short and curlw hair he has a thick beard. His form is heavy and robust. In the first rush of his reconquered lib-

liberty, he has strangled the king, [illegible] the altar, [illegible] [illegible] alone, he has put six out of the fight. Those not fallen [illegible] [illegible] ees with a gesture of terror. Another is on his knees on the platform of the altar and extends his hands asking quarter. [illegible] divided by the attachment of the handle the five Ethiopian soldiers armed with great clubs, ending in a crosspiece; but like the police in the comedy, they arrive too late (Fig. 254).

Note 1.p.522. All the ancient texts that have treated the myth of Busiris have been collected and commented on by Helbig at the beginning of his Article:— Vasi di Busiri (Annali. 1874. p. 283-308. Pls. XVI and XVII of Vol. VIII of Monumenti Inediti d'Instituto P. Q). From the list of all the studies devoted to this vase, see Masner:- Die Sammlung antiker Vasen und Terracotten im K. K. Oest. Museum. Vienna. 1892. No. 217, p. 22. The [illegible] *is that which Furtwängler and Reichhold have given in their great work, Griechische Vasenmalerei. I. series, Pl. 51. From this plate has been executed our Plate XXI, that reproduces the most important of the two plates of the decoration of the body.*

If there are faults in the drawing of most figures of this painting, if the group about Hercules is a little confused, the entirety of the scene shows a real harmony of the composition. The persons are well distributed there; their movements are correct and expressive; but what interests us here is less [illegible] by the painter to put into his work what we term local color. He has seen Egypt. He knows what coiffures and clothes are worn [illegible] dignity is indicated for Busiris by the uraeus that rises on his brow. The priests are clothed in those long linen tunics called calasiris, that as Herodotus noted were bordered by fringes;[1] now those fringes are very apparent here. As for the guards on the reverse, they are recognized as negro slaves. Like all people of low condition in the valley of the Nile, they have no clothing but drawers about the loins. They preci[illegible]

liberty, he has strangled the king, who lies on the steps of the altar, his members contracted by agony. Now he casts down the priests that have attempted to bar his passage. By himself alone, he has put six out of the fight. Those not fallen under his blows feel that all resistance is useless. One of them flees with a gesture of terror. Another is on his knees on the platform of the altar and extends his hands asking quarter. A third conceals himself behind the same altar. On the other side divided by the attachment of the handle run five Ethiopian soldiers armed with great clubs, ending in a crosspiece; but like the police in the comedy, they arrive too late (Fig. 254).

Note 1.p.522. All the ancient texts that have treated the myth of Busiris have been collected and commented on by Helbig at the beginning of his Article:- Vasi di Busiri (Annali. 1869. p. 296-306. Pls. XVI and XVII of Vol. VIII of Monumenti Tavole d'accuinta P. Q). From the list of all the studies devoted to this vase, see Masner:- Die Sammlung antiker Vasen und Terracotten im K, K, Oest. Museum. Vienna. 1892. No. 217, p. 22. The most faithful copy that has been given of this curious painting is that which Furtwängler and Reichhold have given in their g great work, Griechischen Vasenmalerei. I. series, Pl. LI. From this plate has been executed our Plate XXI, that reproduces t the most important of the two plates of the decoration of the body.

If there are faults in the drawing of most figures of this painting, if the group about Hercules is a little confused, t the entirety of the scene shows a real harmony of the composition. The persons are well distributed there; their movements are correct and expressive; but what interests us here is less the merits or defects of execution, than the effort attempted by the painter to put into his work what we term local color. He has seen Egypt. He knows what coiffures and clothes are worn there; certain ethnic types have struck him there. The royal dignity is indicated for Busiris by the uraeus that rises on his brow. The priests are clothed in those long linen tunics called calasiris, that as Herodotus noted were bordered by fringes;[1] now those fringes are very apparent here. As for the guards on the reverse, they are recognized as negro slaves. Like all people of low condition in the valley of the Nile, they have no clothing but drawers about the loins. They brandish

clubs; in Egypt the dead on their steles, the superintendents and fellahs in the reliefs of the tombs almost always have a stick in the hand on which they lean, with which they menace the naked shoulders of their inferiors, or that they use to drive animals to plough or to pasture.

Note 1.p.524. Herodotus. II. 181.

In the chase of the wild boar represented on the lower band are not found the same qualities of spirit and freedom as in the principal subject; but there will be noted the garland that decorates the shoulder of the hydria. It is made of two branches that bend over and unite at their top. Among the leaves of olive or laurel gleam openings painted white (Fig. 255). In t the design of all these branches is much flexibility and elegance, as well as a happy contrast between the dark tint of the leaves and the light tone of the fruits.

On some other vases can be found many memories of Egypt and of the African fauna. On a hydria of the Louvre is represented the hunt of the wild boar of Calydon, where the men have an e exotic type recalling the Egyptian.[2] Their hanging tunic swells between the legs like a kind of drawers. On the neck is a water bird resembling the flamingo, that inhabitant of the marsh of the Delta. Under the right handle an ape recalls that of the cup of Arcesilas.

Note 2.p.524. The vase was published in Mon. ined. Vols.VI, VII, Pl. 77. As an example of vases whose decoration seems inspired by Egyptian objects may be cited a little lecythe with black figures, that represents three kneeling figures before what appears to be a mummy case (Am. Jour. of Arch. 1909.p.498).

Some themes found in this series and many details of the kind of those just shown then give reason to think, that the painters of these vases had light from western Asia and Egypt, that they loved to seek there motives, that by a certain exotic flavor aroused the attention of their ordinary public; but it no less from the national myths of Greece that is taken the theme of the decoration on all those vases. In the painting of the murder of Busiris, on the banks of the Nile is placed the scene of the action and the artist desired to give the image something of the appearance of an Egyptian painting; but the subject treated no less remains purely Greek, by the role of Hercules; this is an episode of the most popular history of the

Greek heroes. On the other hydrias of this group, the [illegible] have the same character. To speak here only of the vases [illegible] the Louvre, so is the chase of the wild boar of Calydon [illegible] the abduction of Europa.[1] Also the contest of the Centaurs and [illegible] nes, who is seized by terror at the sight of the monster, who conceals himself in a pithos (Fig. 256).[1] Then the little Her- [illegible] and concealed them in another thicket of brushwood, has lain down in his cradle and pretends to sleep, while around him is an animated discussion and asks who might be the thief (Fig. 257).[2] Achilles makes an ambuscade for Troilos in the plain of Troy, who seizes him and slays him in his flight.[3]

Note 1. [illegible]

Note 2.p.525. Louvre. Hall E, 700.

Note 1.p.526. Louvre. Hall E, 701.

[illegible]

Note 3.p.526. Louvre. Hall E, 703.

One cannot doubt that these hydrias are later than the pottery that we have preserved as the most ancient and authentic types of Ionian ceramics. Between the ... of the plates [illegible] of poetry, which with a marvellous wealth of imagination [illegible]. These myths have been repeated by the rhapsodists in the elegies and around the festal table. Men loved to find them shown in the [illegible] vases of metal or clay, that ornament the houses and then find [illegible] ral ornaments, by those processions of animals, that formerly had no aim in the decoration of familiar objects, except to amuse for the moment the eye of the spectator. Now they prefer to see represented an action in which the mind can be instructed. On those hydrias of Caere where is not represented an adventure of the gods or heroes, there are at least chariot teams, games of stage or lions.[4] Thus on a hydria acquired at Caere itself for the museum in Berlin, there is on one side a driver mounting a chariot drawn by two horses, on the other side being [illegible]

Greek heros. On the other hydrias of this group, the images h have the same character. To speak here only of the vases of t the Louvre, so is the chase of the wild boar of Calydon and t the abduction of Europa.[1] Also the combat of the Centaurs and the Lapithae.[2] This is Hercules bringing Cerberus to Eurysthenes, who is seized by terror at the sight of the monster, and conceals himself in a pithos (Fig. 256).[1] Then the little Hermes, that after having stolen the oxen of his brother Apollo and concealed them in another thicket of brurhwood, has lain down in his cradle and pretends to sleep, while around him is an animated discussion and asku who might be the thief (Fig. 257).[2] Achilles makes an ambuscade for Troilos in the plain of Troy, who seizes him and slays him in his flight. [3]

Note 1.p..25. Louvre. Hall E, 698.
Note 2.p.525. Louvre. Hall E, 700.
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Note 3.p.526. Louvre. Hall E, 703.

One cannot doubt that these hydrias are later than the pottery that we have presented as the most ancient and authentic types of Ionian ceramics. Between the Oenochoes or the plates of Camiros and the hydrias of Caere are the efforts of two or three generations of painters; there is also the rapid flight of poetry, which with a marvellous wealth of imagination does not cease to invent myths and diversify them infinitely. Those myths have been related by the rhapsodists in the elogies and around the festal table. Men loved to find them shown in the paintings that decorate public and private edifices as well as vases of metal or clay, that ornament the houses and then form the equipment of the tomb. They are no longer satisfied by floral ornaments, by those processions of animals, that formerly had no aim in the decoration of familiar objects, except to amuse for the moment the eye of the spectator. Now they prefer to see represented an action in which the mind can be instructed. On those hydrias of Caere where is not represented an adventure of the gods or heros, there are at least chariot teams, hunts of stags or lions.[4] Thus on a hydria acquired at Caere itself for the museum in Berlin, there is on one side a driver mounting achariot drawn by two horses, on the other side being a lion hunt (Figs. 258, 259). In the first painting and behind

the horse as a person that seems to speak to the drover, and [illegible] ging on the rump of the horse doubtless offered as a bait, there is nothing but a horseman armed with a long spear, who attacks the lion from behind. The painter does not lack skill. One notes the method that he has taken to lower the head of the second horse and the very correct drawing of that head, as [illegible] rendering of his muzzle.[1]

Note 1. p. 528. Louvre. Hall 2. 697, 698.

[illegible] 11. 28 of Vol. II of Antike Denkmäler, states that this is there the first hydria of Caere, whose decoration is represented in the colors of the original.

[illegible] than in their entirety are less ancient than the cups of Cyrene. In them the potter still has the technics of the [illegible] costume. He has entirely renounced it here; but he is still more in the [illegible] ses and to seek contrasts. With their yellow ground, their re- [illegible] in their first freshness presented a rich and gay coloring. Unfortunately the white being very fragile, has often fallen off; sometimes only the trace of it is scarcely visible.[2] As at Cyrene, the painter of these hydrias currently employs the process of engraving that was unknown to the first Ionian potters. Thus as with the point and a neat and firm line, that on the clay hardened by a first passage through the kiln, he has dra- [illegible] tents with black with which he charged his brush; on it he has placed white and red in spots; then he has resumed the point to indicate the interiors of the figures and details of the costume and the rendering of the body.

[illegible] Eastern vases and on the hydria of our Figs. 251, 252. On that reproduced in our Figs. 253, 255, according to [illegible] the publisher of the vase, the second horse and the flesh of the men were tinted white; but this white was laid on black. It has [illegible]

the horses as a person that seems to speak to the drever, and appears to be a woman. On the other side, with the lion springing on the rump of the horse doubtless offered as a bait, there is nothing but a horseman armed with a long spear, who attacks the lion from behind. The painter does not lack skill. One notes the method that he has taken to lower the head of t the second horse and the very correct drawing of that head, as in the other scene is the movement of the lion and the broad rendering of his muzzle.[1]

Note 4. p. 526. Louvre. Hall E. 697, 698.

Note 1.p.527. Hartwig, who wrte the joint note added to Pl. 28 of Vol. II of Antike Denkmäler, states that this is there the first hydria of Caere, whose decoration is represented in the colors of the original.

The hydrias od Caere are then of a sensibly more recent date than the Rhodian oenochoes, and there is even reason to believe that in their entirety are less ancient than the cups of Cyrene. On them the potter still had the technics of the whote coating. He has entirely renounced it here; but he is still more in the Ionian tradition by the pleasure that he takes to vary the tones and to seek contrasts. With their yellow ground, their retouches of profile and of white laid on the black, these vases in their first freshness presented a rich and gay coloring. Unfortunately the white being very fragile, has often fallen off; sometimes only the trace of it is scarcely visible.[2] As at Cyrene, the painter of these hydrias currently employs the process of engraving that was unknown to the first Ionian potters. This is with the point and a neat and firm line, that on the clay hardened by a first passage through the kiln, he has drawn the sketch of his composition. He has then filled these contours with black with which he charged his brush; on it he has placed white and red in spots; then he has resumed the point to indicate the interiors of the figures and details of the c costume and the modeling of the body.

Note 2.p.528.The whites have remained very visible on the v Busiris vase and on the hydria of our Figs. 251, 252. On that reproduced in our Figs. 259, 259, according to Hartwig the publisher of the vase, the second horse and the flesh of the men were tinted white; but this white was laid on black. It has fallen off, and there remains only slight traces of it which

give to the nudes the appearance of a washed black, and which would make believed an attempt at modeling, which is an illusion.

So much for what concerns the general arrengement of the decoration and the interest of the themes as for the execution of the figures, these hydrias represent a very advanced state of Ionian ceramics, and one would like to know in what city they were made; but for these vases one does not have the same resources as for those attributed to the workshops of Cyrene. In the subjects of the paintings, here are no myths that properly belong to one city rather than another, no scene that like the weighing of silphium, has a local character. Phocea has been thought of, recalling its enterprising spirit and the outlets of which it was assuredon a number of markets, in the western basin of the Meditarranean; it has been said that it would be possible, that after the events of 544 and the voluntary exile then imposed on the Greeks, who had not desired to become Persian subjects, that Phocean ceramists went to establish themselves in Etruria. Nothing requires the rejection of the hypotheses as improbable; but one lould no more invoke in its favor the slightest indication, that authorizes giving the honor to these vases to Phocea rather than to any other of the important cities of the same country.[1]

Note 1.p.529. On the reasons that one could have to attribute these hydrias to Naucratis or at least to an Ionian city t that had maintained constant relations with Egypt, see Dümmler in Römische Mitttheilungen. 1888.p. 171 et seq. Winter also occupied himself with the hydrias of Caere.(Studien zur älteren griechischen Kunst, in Jarb. 1900, p. 83-92). Before describing the Busiris vase, Furtwängler had already stated his ideas on this subject. (Die antike Gemmen. Vol.III. p. 89-90).

We have described the principal species of Ionian ceramics, those which are represented in our galleries by numbers of examples in beautiful preservation, that further allow themselves to be difined by very particular traits, for each of them gives the measure and the tinge of the taste that reigned at a certain time in a certain workshop of Ionia or of its foreign dependencies. That we cannot without risking losing ourselves in details, insist as much on many secondary varieties, that all refer to the same methods, yet present less distinct character-

characteristics. We can only mention a series of vases that it has been proposed to call Pontic, because on one of them it is thought is recomgnzed Scytnianr by their costume and mode of combat.[1] It has been said that these vases were made in some one of those Ionian colonies of the Euxine sea when the Greeks were in contact with those barbarians. It does not seem that there is reason to decide for this conjecture. There is only one of these vases on which appear Scythian horsemen, crowned by the pointed caps and turning about to loose their arrows at the enemy, before whom they seem to flee. Now we have already met with this type, that exceted the curiosity of Greek observers, on the sarcophaguses of Clazomenes;[2] we shall find it a again on Attic vases. Finally it is from the cemeteries of Etruria that came all the vases to whimh may be attributed this origin. Is it probable that the Ionian merchants who trafficked with the West went so far to seek the pottery that they supplied to their Italian patrons, when they could find it at Samos or at Phocea? Or indeed will there be supposed, which is still more difficult to admit, direct relations between the p ports of southern Russia and those of the coast of Tuscany?

Note 1.p.530. F. Dümmler. Ueber eine Classe griechischen Vasen mit schwarzen Figuren (Jahrb. 1887. p. 171-182, Pl. 8-9).

Note 2.p.530. Histoire de l'Art. Vol.IX. p.269, Fig. 123.

These vases are mostly amphoras. There are a certain number of amphoras which strongly resemble the hydrias of Caere.(Fig. 269). "This is the same heave style, the same use of white, t the same fashion of drawingthe Silenes and Centaurs, frequently the same ornaments and subjects."[3] One of the most curious of those amphoras is the vase of the museum of Munich, that represents the judgment of Paris. White is largely employed t there; but what seems especially to betary Ionian taste are certain realistic and picturesque details, such as in the representation of the flock of Paris is the dog with his tongue out, the bull resting his head on the rump of his neighbor, t the bird perched on the back of one of the oxen. One of the w women wears a sort of pointed cap called tutulus by the Romans, and which was the ordinary coiffure of Etruscan women, from which one could infer that the vase was made in Etruria (Figs. 261, 262). There are also a certain number of oenochoes on which

the decoration is entirely similar.

Although many cups could be cited, which by their forms and lightness recall the cups of Cyrene, but which are distinguished from them by the absence of the light coating. There is recognized the hand of the Ionian worker by a warm polychromy, by certain details of the decoration, by the manner in which are traced there the garlands of ivy and of lotus flowers and particularly lotus buds, capriciously scattered over the field where they rise from a simple stem. Such are the beautiful cups discovered at Siana, probably the ancient town of Mnasyrion n near Camiros.[1] Such are also two cups found in Etruria, that entered the Louvre with the collection Campana.[2] There is reason to attribute the same origin to the crateras that are al - so due to Tuscan cemeteries, and some of which are at least in part covered by a white glaze. Such an image, for example that of two deer with mottled skins arouse the memory of types often reproduced by Ionian painters (Fig. 127).[3] One of those crateras presents a vern rare peculiarity, that completes the demonstration of relationship with Asian products, such as the s sarcophaguses of Clazomenes. this is the use of white lines l laid on the black, and concurrently with the incised lines serving to indicate the details of the muscles or the folds of t the vestments.[4] Among the different vases that it may be believed right to place to the credit of Ionian workshops, we again mention an amphora from an Etruscan source, on which is seen on a band, two cocks facing each other in a fighting attitude. (Fig. 263). It is believed that there is found a copy of a frieze of Xanthus, so striking is the resemblance between the painted and sculptured motives.[2] Further, what forms the special interest of this vase is its form." With its elongated curve, its slender and slightly concave neck, its flat and quite detached handles, its superposed zones of subjects, it recalls the well known series of small amphoras signed by Nicosthenes.[3] "It has already been proposed to see in Nicosthenes an Ionian potter, that after the misfortunes of Ionia came to found at Athens that well frequentel workshop, whose products were distributed in the entire Greek world. The amphora represented a above confirms this hypothesis. By its entire proportions and by the design of its handles, which are slightly dry and thin, it however differs froc the amphoras of Nicosthenes." It would

be called a first attempt, a sort of sketch, that being later revised and perfected would have given the classic type that we know."[4] It will suffice to mention for memory the very small pithoi, decorated by zones of animals with garlands of leaves, pomegranates, lanceolate leaves and other Ionian motives.[5] A great number of them have been found at Samos.[6]

Note 1.p. 32. C. Smith. Four archaic vases from Rhodes.(Jour. Hell. Studies. 188 . p. 220-240. Pl.40-43). Without adhering much to that name, C. Smith ranges these vases in the category of Chalidian vases, yet quite badly defined. With Potties (Catlogue, p. 495), I should rather connect them with Ionian caramics.

Note 2.p.532. Pottier. Catalogue, p.531. Louvre.Hall E, 675-676.

Note 3.p.532. Louvre. Hall E, 677. Pottier. Vases antiques du Louvre. Pl. LII).

Note 4.p.532. Pottier in B.C.H. 1893. p. 425. See on the subject of these vases the entire Article:- Documents ceramiques du musee du Louvre. p.423-424.

Note 1.p.534. B. C. Hell. 1893. p.431-433. Louvre. Hall E,70,.

Note 2.p.534. Collignon. Histoire de la sculpture. I. p.268, Fig. 121. Brunn-Brückmann. Denkmäler. Pl. 105.

Note 3.p.534. B. C. Hell. 1893. p.433.

Note 4.p.534. The same. p. 433.

Note 5.p.534. Pottier. Catalogue. p. 541-542. Louvre. Hall E, 709-716.

Note 6.p.534. Böhlau. Aus ionischen und italischen Nekropolen. p.145, Figs. 68, 69.

On all the vases that we have so far studied, while not failing to borrow some things from the practices of the potters of Corinth and of Athens, the Ionian potter has remained faithful to what may be termed his principle, that of decoration by zones. What announces the approaching triumph of the schools of European Greece is the mode introduced at a certain time in t the Asian workshops, for placing the figures after the example of the Attic painters in a panel reserved on the body. This panel is something analogous to the metope of the friezes of Doric architecture. It furnishes a convenient means of isolating the figures and of giving them more value by increasing their height. One of the most ancient examples of the application of the new methods would be an amphora with black coating supposed to have been found at Caere, and which with all reser-

reserves, we have classed among Grecian vases (Fig. 217).

There is the same tendency that is obeyed even more decidedly [illegible]
longer distinguished from Attic amphoras of the classic type [illegible]
[illegible]
cony.[1] It would be attributed without hesitation to an Attic [illegible]
character. In the eye in the male figures sometimes has here [illegible]
retains the oval shape affected by Ionian designers, an indication [illegible]
[illegible]
head of being painted white as usually on Attic vases, are colored black as well as the men.[2] It is very possible that driven from that country by the Persian conquest, Ionian potters [illegible]
[illegible]
such as the amphora of the Louvre on which is represented [illegible]
Athens.[3] There may also be cited as belonging to the same group several oinochoai of the museum of the Louvre, one of which represents the scene of Komos (Vignette at end of Additions and Corrections). It has been proposed to call these vases Attico-Ionian.[4] This is in the same category with which is also connected the beautiful cup of Etruscan source, on which [illegible]
[illegible]
repast has been devoured by Harpies, to whom the sons of Boreas then gave chase; then on the other half of the circumference are scenes of Dionysiac orgies (Fig. 264). On the reverse of the cup are groups, satyrs struggling with bacchantes. In the centre of the basin is the mask of a man with long hair seen in front view (Fig. 265). This vase was found at Vulci; it now belongs to the museum in Wurzburg. The diameter of the cup is 15.35 ins.[5]

[illegible]

[illegible]

[illegible]
Vol. VI-VII, Pl. 75, is not perfectly correct.

[illegible]

reserves, we have classed among Rhodian vases (Fig. 217).

There is the same tendency that is obeyed even more decidedly by the potters to whom are due certain vases that are scarcely longer distinguished from Attic amphoras of the classic type with black figures. Such is the case for an amphora in the Louvre from an Italian source, on which is reproduced a gigantomachy.[1] It would be attributed without hesitation to an Attic workshop, if the alphabet did not have a very marked Ionian character. Id the eye in the male figures sometimes has here the round form as in the paintings of European Greece, and sometimes the oval shape affected by Ionian designers, an indication of Ionianism can be seen in the fact that the flesh of t two goddesses taking part in the combat, Hera and Athena, instead of being painted white as usually on Attic vases, are colored black as well as the men.[2] It is very possible that being driven from that country by the Persian conquest, Ionian potters came to seek an asylum and work at Athens. They would have executed there this vase and other similar ones, for example such as the amphora of the Louvre on which is represented Hercules fighting the Amazons, then introduced into Olympus by A Athena.[3] There may also be cited as belonging to the same group several deinos apodes of the museum of the Louvre, one of which represents the scene of Komos (Vignette at end of Additions and Corrections). It has been proposed to call these vases Attico-Ionian.[4] This is in the same category with which is also connected the beautiful cup of Etruscan source, on which a are represented the myth of the divine blind Phineus, whose repast has been devoured by Harpies, to whom the sons of Boreas then gave chase; then on the other half of the circumference are scenes of Dionysiac orgies (Fig. 264). On the reverse of the cup are groups, satyrs struggling with bacchantes. In the centre of the basin is the mask of a man with long hair seen in front view (Fig. 265). This vase was found at Vulci; it now belongs to the museum in Wurzburg. The diameter of the cup is 15.36 ins.[5]

Note 1.p.536. Louvre. Hall E.732. Pottier. Catalogue. p. 544-545; Vases antiques du Louvre, p. 68. General view in Pl. 54. The image given with an Article of O. Jahn in Monumenti. Vol. VI-VII, Pl. 78, is not perfectly correct.

Note 2.p.536. The plate of Monumenti erroneously gives white

flesh to Athena. There is no longer a trace of white in the o original, on the face and arms of Athena than on those of Hera.

Note 3.p.536. Hall E, 733. Pottier. Catalogue. p. 545. Vases antiques. p. 69. General view on Pl. 54.

Note 4.p.536. Pottier. Catalogue. p. 545; Bull. Corr Hell. 1893. Vases du type ionien. L'Ionisme en Attique. p. 423-444. Our vignette is reproduced there on p. 427.

Note 5.p.536. Furtwängler first rendered justice to the cup of Phineus, that had already attracted attention, but whose original merit had not been seized in a time when the study of painted vases was less advanced than it is today. He gave a detailed description, and due to the conscience anf the talent of his collaborator, Reichhold, a faithful reproduction . (Griechische Vasenmalerei. I. series of text. p. 209-241 and Pl. XLI as well as the figures inserted in the text for the reproduction of the paintings on the outside of the cup). We have only had to summarize his observations.

Almost at the middle of the circle, Phineus lies on a bed a and extends his uncertain hands toward the table, that seek in vain the food that has just been carried off by the wicked thieves. The gesture is expressive; with the drawing of the closed eyes, it gives the impression of truth. Around Phineus stand three women clothed in the long Ionian tunics. One is behind and the other two in front of the bed. The first is Egichtho, and is doubtless the wife of Phineus. The two women that walk forward are divine personages. What remains of a scarcely visible legend, Hora, defines them as the Hours (Fig. 266). T Then come two Boreades, that with sword in hand give chase to two Harpies. The four male and female demons have great wings on their shoulders and smaller wings on their feet. Before the Harpies is a black mass, whose upper edge is notched and represents the waves of the sea, over which flee the stealers of the food, to escape the ardent pursuit. One of them still holds in hand one of the plates that she has taken from the table. At this side the scene is closed by a wall that presents the appearance of a black and white chessboard (Fig. 267). Behind the wife of Phineus it is limited by bunches of ivy, among which is seen the mask of a lion as the outlet of a fountain. It is necessary to supplement in thought the surface of the rock, from which spouts the spring and the rippling water. Near this

spring is a palm tree. What closes the scene at the right is the wall toward which flee the Harpies. On the side of this wall toward Dionysos and his companions is another lion's mask, that is supposed to spout a stream of water. This wall then r represents a monumental fountain.

Note 1.p.538. The figures opposite give at a very reduced scale a general view of the cup, which allows one to seize at a glance the series of different scenes in four sections. The exigencies of our page has compelled the omission of one of the Boreades to avoid reducing the figures too much, which would have changed their character.

The scene found thus between the ivy branches and the fountain is divided in two parts, like its pendant. At the left are three women, nymphs that the heat of the day has led to the c cool water flowing from the spring concealed in the mass of i ivy. To enjoy this coolness, they have removed their clothing, which is suspended on projections of the rock, and with hair hanging on their shoulders, they cause the water to run over their nude limbs (Fig. 268). Two of them seem to be entirely occupied in washing themselves. The delights of the bath prevent them from thinking of what passes in the vicinity; but the third has heard a noise, and turns her head. Her anxiety is j justified. Behind a second palm tree two nude selenuses advance toward the group of women, walking carefully to silence the n noise of their steps, hoping to surprise the bathers. Their faces are impressed by brutal desire, expressed by other traits that we cannot think of reproducing here.

Behind these silenuses, Dionysos stands on his chariot near his spouse Ariana. He holds in his hands the reins and whip. To his chariot are harnessed a lion and a panther, then two stags with great horns (Fig. 269). Placed on the tongue of the chariot and sustaining himself with one hand on the horns of the two stags, a blind Silenus capers with his head in the direction of the passing of the chariot. He does not show has f face to the god, his master. A last Silanus is placed before the chariot of Dionysos and seems to watch the movement of the team.

In the entirety of this painting is an energy and warmth that makes it a work of exceptional value, in which is recognized

the hand of a true artist. All gestures are expressive, from that of Phineus holding his hands blindly toward the empty table to those silenuses, that show the transports of a lewdness foreign to all shame. The calm attatude of the Hours standing before Phineus contrasts in the happiest manner with the violence of the pursuit in which are engaged Boreades and Harpies. In the other scene is the same opposition between the grave dignity of the divine pair standing in their chariot and the violent movements of the silenuses.

All here bears the mark of Ionian taste. This is recognized in the effort made to clearly locate the scene by the addition of significant accessories, such as these two fountains, one of which is concealed by the abundant ivy, like the two palms that seem drawn from nature. This same taste makes its influence felt in the picturesque group of this strange team, that u unites to the same tongue animals so different in fur and in appearance, and which is dominated by the great entangled horns of the two stags. The costumes of the men and women are Ionian. It is also a characteristic of the drawing of Ionian painters, the method taken here to indicate the contours of the body under the tunic. On the Chalcidian and Attic vases, these and not suspected. The body is as if concealed within a sack that causes nothing to be divined. It is again a type familiar to Ionian painters, the silenuses furnished with tails and horses' hoofs.

I do not know if there be not some subtilty in the explanation proposed for the selection of the scenes; that the decorator has here brought together in the decoration of his cup . It is said that the general theme would be the representation of the expansion of life on the surface of the earth. The Hours are the divinities that by the change of seasons preside over the development of vegetation. On the other half of the cup, with Dionysos who pours out the juice of the vine and with the silenuses inflamed by lust, we have the expression of animal life in itr overflow into sensuality. I doubt that the artist even vaguely had the idea of that synthetics. What seems natural to him is, that an Ionian potter should think of reserving a place for Phineus in one of his works. Phineus was a diviner that passed as having aided the Argonauts to struggle against the strong currents of the Bosphorus and to undertake the stormy

waves of the Euxine. There must have been there for the sailors of Miletus, when they attempted their first voyage to the north-east, many difficulties to conquer, many emotions to brave, p perils whose memory was preserved in the myth of Phineus and in the aid given by this personage to the explorers of those hitherto unknown coasts.

However this vase is distinguished in certain respects from those like the hydrias of Caere, that it is proposed to attribute to a workshop of Asian Greece. No polychromy here. Nothing but black figures placed directly on the clay.[1] A careful analysis has revealed in the execution many traits, that recall t the fabrication of the vases of Chalcis and of Athens. The refined connoisseur that first brought to light the singular merits of this vase was inclinde to see in it the work of an Ionian workshop, but of one situated in the vicinity of Attica and of Eubea, that would have in a certain measure suffered the influence of the works of these two countries.

Note 1.p.543. On an Ionian school that executed vases with black figures, see B. Graf. Arch. Anz. 1893. p. 18. This school is much represented in the fragments scattered among the rubbish, that came from the sack of the Acropolis by the Persians).

According to Furtwängler, the native land of this cup should be sought in the Cyclades and particularly in that island of Naxos, that as attested by its coins was placed under the protection of Dionysos, and rendered a heriditary worship to him. About the end of the 6 th century, there would have been in t the Cyclades a school of ceramists, that had commenced to produce remarkable works, but whose activity was very soon arrested. Athenian manufacture, by its progress and by the success found everywhere by the products of its kilns, slew the rivals that merited to live, but were not sufficiently equipped to s sustain the struggle.

Without stopping to discuss this hypothesis in favor of which can be invoked only very slight indications, we have believed that we must call attention to this cup, that wherever it was made and decorate, is one of the most curious and most interesting that can be placed to the credit of Ionian ceramics.

One can also compare the cup of Phineus to those cups at the Louvre ayd two hydrias [1] as well as to several crateras that

belong to the same museum.[2]

Note 1.p.544. Louvre. Hall E, 740-742.

Note 2.p.544. Louvre. Hall E, 734-739.

Finally, there is reason to pass to the credit of the workshops whose work on little vases we have studied here, a very careful work that at the first moment was termed Corinthian or protocorinthian for lack of knowing where to place it, although it had no reason to appear in those lists. I speak of those known to cosmographers under the names op the Macmillan lecythe and the Chigi vase.

The Macmillan lecythe was so-called from the name of the distinguished amateur that gave it to the British Museum, and is an aryballic lecythe purchased at Thebes.[1] It is only 2.68 ins. high. Surmounted by a lion's head very broadly modeled with o open jaws, it is decorated by two zones of figures. All their contours are drawi in finely incised lines. As colors employed, there is ablack whose tone has passed to brown in places, and some light touches op purple. The nude of the flesh is indicated by a reddish gray, that on the original is very well distinguished from the dead black, that has been used for the rest of the images. In the principal zone is a very confused battle scene. Its character is divined in the general view that we give of the lecythe (Fig. 270). In the lower zone are two bands. On one is a race of cavaliers at a gallop, and on the other is the hunting of the hare (Fig. 271).

Note 1.p.545. Jour.Hell.Studies. Vol. XI. 1890. p.167-180. Pls. I, II.

The vase that forms a part of the collection of prince Chigi Albano was found near Veii.[2] It is an oenochoe 10.24 ins. high (Fig. 272). The figures on the upper zone, whose contours and details are indicated by incised lines, are detached in black or reddish brown on a glaze of pale yellow. There are some touches of purple. On the lower band they rise in white from the black ground. At the top at one side are two bands of hoplites with helmets and covered by cuirasses and broad round shields, who advance against each other with lowered spears. A trumpeter excites the combatants.(Fig. 273). At the middle of the second zone on the front of the vase is a winged sphynx seen in front view, and at the sides of the sphynx on the left is a file of

horsemen and chariots, on the right being a lion hunt, a sequence to which is a group representing the judgment of Paris, of which remains but one person and some fragments of inscriptions (Fig. 274). At the bottom is the hunt of a hare (Fig. 275).

Note 2.p.545. Antike Denkmäler. Vol. II. P.s. XLIV, XLV. Notice by G. Karo.

The delicacy of the execution of figures of such small height justifies the name of miniatures employed to define the character of these paintings. It can also be applied to the oenochoe as well as to the lecythe. Between the two vases is a very visible relationship, and if we have thus brought them together, it appears to us that if not from the same workshop, both have been decorated by workmen subject to the same influences and that had the same habits, in some city where they worked.

That of these two vases most strongly marked by the stamp of Ionian taste is the Chigi oenochoe. There is no reason to attribute it to Ionian manufacture. What remains of the names written near the persons of the scene of the judgment of Paris does not belong to the Corinthian alphabet. There is not found the Corinthian form of sigma. The clay does not seem to be that of Corinth. Further, one can indicate there many traits by which this piece is connected to the series of vases, that represent the ceramics of eastern Greece. For the nude of the flesh the painter has adopted a grayish rose, that we have already seen used for the same purpose on the amphoras of Melos. It is in white and on a black ground that are detached the palmatiums and interlacings traced on the neck of the vases. Again in white is painted the band of dogs running after hares and ibexes. (Fig. 275).[1] In the same scene of the chase with the dogs are a hare, a fox and ibexes. This causes one to think of the variety of animals that fill the zones of Rhodian oenochoes. Note also the brushes behind which are ambushed and concealed the hunters. One of them, not to be perceived by the hare that comes toward him at its greatest speed, is lying flat on his belly on the ground. The other crouches behind the bushes and holds his dog, ready to spring forth. He carries two hares already caught, fastened to a stick resting on his left shoulder. This recalls the indications of the country and those picturesque details by which the Ionian painter pleased himself, as we have recalled on more than one occasion. In the same spirit

he composed the scene of the lion hunt with the hunter overthrown, whose shoulder is fixed in the mouth of the beast, while the other hunters pierce the flanks of the beast with their s spears. Represented by touches of purple, the blood of the man and that of his conqueror flow in waves. Finally, what again merits the attention there is the winged sphynx, that occupies the middle of the painting. From the head of the sphynx are h here detached the two plumes, that the Ionian decorator has frequently borrowed to coif his sphynx on paintings and the i ivories of Mycenaean art (Fig. 226).

Note 1.p.546. On the use of white in Ionian ceramics, see Pottier. Catalogue. p. 165, 378, 501-503.

We are assured that the Macmillan lecythe is of Corinthian clay. It was then perhaps made at Corinth; but it is no less saturated by Ionism, and this authorizes us to place it here. The nudes of the flesh are of the same tone as on the Chigi oenochoe. In the figures, which are less complex here, there are many details that recall motives dear to the Ionian painter. Such are the swan and especially the ape that we have seen placed in the widest of the two zones beneath the bellies of the racing horses (Fig. 271). What is still more significant is in the lower band the crouching hunter, armed with a club that he is going to throw at the hare. There is before him a triple scroll. This motive can be only an abbreviation caused by the narrowness of the field, of the bushes that shelter the hunters on the Chigi vase. Finally, what concurs to make it believed, that the potter was inspired by a model of clay or of metal, that came to him from Asian Greece, is the lion's head that surmounts the lecythe (Fig. 270). The face of the great beast seems to have been copied from nature. It recalled to t the first publisher of the vase the lions of Assyria and of Egypt. He observed on this point, that the idea of giving to an alabaster or an Aryballa as a crown the head of an animal or of a man, must have been suggested to the Greek potter by those little vases in Egyptian faience, numerous examples of which were found in Rhodian tombs.[1]

Note 1.p.548. C. Smith. Jour.Hell.Studies. 1890. p.169-170. See on these vases of glazed clay, Histoire de l'Art. Vol. V. p. 674-676.

We shall not stop for vases that appear to have been made

in Italy in imitation of foreign models. It is not to call in doubt the existence of these workshops in which Greek painters established in Etruria and doubtless with them native painters trained in their school, executed pieces of hybrid style in w which were combined three great artistic currents, Corinthian, Ionian and Etruscan. An example of this kind in the museum of Wurzburg bears a painted inscription in the Etruscan language;[1] but what even more than this brief legend attests the activity of the workshops in question is a great number of vases coming especially from Caere, that are characterized by this hybrid and entirely borrowed style.[2] Their clay is soft, whitish or gray; it resembles that of the bucchero that has not been smoked; It is not that nf the Ionian vases; but from their decoration is borrowed most of the motives, the bands of passing a animals, prophylactic eyes, lotus flowers, garlands of lanceolate leaves, Ionian costumes, genii with great wings attached to the girdle, imbrications that fill the parts of the field where are no figures. As a specimen of these Etruscan imitataons we reproduce here the interior decorations of a cup, that about 1890 formed a part of the collection of W. Rome (Fig.276). There is something not truly Greek in the wings given to these archers and in the club with which their right hands are armed, and makes a twofold use with the bow.[1] Broad white retouches recall the marked predilection of Ionian potters for vivid colors.[2] Nowhere has this taste for very showy polychromy been carried darther by these Tuscan potters inspired by Ionian ceramics, than in the group of vases known under the name of pottery of Polledrara, from the name of a domain located in the territory of Vulci. These vases are made of red clay covered by a very lustrous black. On this coating is placed the decoration executed in red and blue with broad touches of yellowish white. On the most important piece, a hydria 7.09 ins. high, are memories of the myth of Theseus, Theseus slaying the Minotaur, Theseus and Ariana present in a dance by which in the island of Delos, Athenian youths celebrated his deliverance; but these persons are as if confused in a multitude of fanciful images, files of chariots, centaurs and various monsters. all that shows an imitation not exempt from awkwardness.[1] The form of the hydria is awkward. The drawing of the figures is heavy and cold.

Note 1.p.549. Zahn. Athen. Mitt. 1898. p. 65.

Note 2.p.549. Louvre. Hall E, 744-784.

Note 1.p.550. I owe to the courtesy of M. S. Reinach the loan of a watercolor reproduced here. He had seen the cup exhibited at the Guildhall in London, and had caused it to be copied by Anderson.

Note 2.p.550. Pottier. catalogue. p.549-550.

Note 1.p.551. C. Smith. Jour.Hell.Studies. 1894. p. 206. The hydria is reproduced there in color from a watercolor by the skilful and accurate draftsman, Anderson.

We shall terminate this survey here. To the credit of the Tuscan potter is it proper to carry this kind of imitations. If we have decided to mention these vases, this is to follow in its foreign extensions and into its most distant derivatives the fertile influence of this Ionian art to which the historian cannot give too large a part in the view that he traces of the first procedures and the first successes of Greek genius.

9. General Characteristics of Advanced Ionian Ceramics.

The place in this history, that we have assigned to Ionian ceramics might seem not to be exactly proportional to that occupied by the monuments of this art in the galleries of antiquities. These monuments are there in much less numbers than t those of the ceramics of Corinth and of Athens. They form there only a very short and very incomplete series. Yet it is not w without just motives, that we have made the part so beautiful, and that we have accorded a favored treatment to it, if one m may so speak. It had a primary right to an attention; its antiquity.

As attested by the vases found at Thera beneath the pumice stone, men commenced from the most distant times in the basin of the Egean sea to decorate vases with the brush. Later, in the Mycenaean age this painting on clay had already assumed an art character; it knew now to interpret with talent the forms of the plant and of the animal. It even attacked with more reserve the human figure, and sometimes rendered with some success the most lively movements. Then after the fall of the brilliant civilization of the Achaian kingdoms, in the decoration of clay as in that of metal was the reign of the geometric style, whose laborious and cold artifices gave reason to think, that the artist who practised it had his eyes closed to the

view the beauty of the life displayed on the surface of the

[illegible]

ted to overthrow and prolong the empire of this style, after

[illegible]

[illegible]

[illegible]

the cities founded on the coast had become prosperous and pow-

erful, men could apply themselves in that Greece overseas, to

[illegible] on the opposite shores, to reproduce and vary those line-

[illegible]

disposed of in the rest of the Hellenic world; but they delig-

[illegible]

ed what we could term nostalgia for the living form. There all

concurred to arouse this slumber of a sense that was only sle-

eping. Certain habits of the trade and of taste for certain t

[illegible]

of artisans attached to those princes descended from great Aon-

sian families, who reigned at Ephesus, Miletus and in other I

[illegible]

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ated arms, that had been left to them by those ancestors whose

names echo in the songs of the rhapsodists. There would have

been so many models which could aid the workmen to understand

[illegible]

demanded all its effects from geometry.[1]

Note 1.p.653. On the persistence of the motives of the Myce-nean style in Asian and European Greece see S. Wide. Nachleben [illegible]

Other suggestions came at the same time to cause to penetr-

ate into minds the desire of a change of residence, and to fav-

or the progress implied. Greek colonists from the time that t

they were fixed on that coast, at the mouths of the rivers des-

cending from the plateaus of Phrygia, found themselves masters

of the roads at which ended several routes, that in the inter-

[illegible]

of the great industrial centres of the valley of the Euphrat-

[illegible]

they had chosen, when they turned to the sea and had launched

[illegible]

view the beauty of the life displayed on the surface of the e earth; but if in European Greece the Dorian invasion contributed to strengthen and prolong the empire of this style, Asian Greece was not affected by the pushing of the tribes, that knew only that system of decoration. In violent shock there came to break the chain of traditions. During a certain time, before the cities founded on the coast had become prosperous and powerful, men could apply themselveu in that Greece overseas, as done on the opposite shores, to reproduce and vary those linear motives, which were then the only ones that the ornamentist disposed of in the rest of the Hellenic world; but they delayed less than elsewhere in abandoning this order and experienced what we could term nostalgia for the living form. Where all concurred to arouse this slumber of a sense that was only sleeping. Certain habits of the trade and of taste for certain t types had transmitted from generation to generation in groups of artisans attached to those princes descended from great Achaian families, who reigned at Ephesus, Miletus and in Other I Ionian cities. Perhaps also those Ionian princes preserved in their traditions some objects, vases of metal or richly decorated arms, that had been left to them by those ancestors whose names echo in the songs of the rhapsodists. There would have been so many models which could aid the workman to understand how insufficient were the resources of an ornamentation that demanded all its efforts from geometry.[1]

Note 1.p.553. On the persistence of the motives of the Mycenean style in Asian and European Greece see S. Wide. Nachleben mykenischer Ornamente. (Athen. Mitta 1897.p.233-2.8). Böhlau. Ionische und Italische Nekropolen, p. 118.

Other suggestions came at the same time to cause to penetrate into minds the desire of a change of programme, and to favor the progress implied. Greeg colorists from the time that t they were fixed on that coast, at the mouths of the rivers descending from the plateaus of Phrygia, found themselves masters of the ports at which ended several routes, that in the interior of the continent brought to the Mediterranean the products of the great industrian centres of the valley of the Euphrates. Feeling themselves solidly established in the positions that they had chosen, when they turned to the sea and had launched strong ships there, they soon entered into relations with Egypt.

[illegible]
shown them on the walls of the cities, what struck their eyes was the image of organic life, diversified in a thousand ways [illegible] and of the animal. How could the ceramists have resisted the [illegible] varied, as that offered by the entirety of the work of the ci- vilizations of the Orient? The clay of the vases to be deco- rated afforded spacious fields of many shapes, on which the brush could play in full liberty, the material being of too [illegible] [illegible]

These attempts did not fail to be multiplied when the potte [illegible] novelties. Taste for the use of painted pottery was hereditary [illegible] soon as commercial relations were formed with the so-called [illegible] tempt them that well burned pottery, elegant in form and orna- mented by colors that pleased the eyes and designs that exci- ed curiosity? This pottery both convenient for use and of plea- sing appearance would have every chance to be substituted eas- ily for the rude pottery, the only kind that these poorly equi- ped societies were in condition to make. The Phoenicians deri- ved great profits from pottery which they sold on the coasts and in the islands of the Atlantic, to the Iberians and the Celts of western Europe.[1] The Ionians did the same in the Med- iterranean and in the seas extending toward the northeast. They had inaugurated this commerce after the middle of the 8 th ce- [illegible] the founding of the colonies that they had scattered over the shores of the Propontis and of the Euxine.

Note 1.p.554. Strabo. III. 5-2.

Hence Ionian genius had acquired and displayed all its force of expansion. In those cities in full flight of faith, the no- bles by birth and wealthy shipowners led a brilliant and luxu- rious life. This is known by many authentic evidences.2 The [illegible] [illegible] into the vases, that appeared on the tables before which the

In all sent to them by Chaldea and Lydia as in all that Egypt showed them on the walls of its chiefs, what struck their eyes was the image of organic life, diversified in a thousand ways and ornamented by the charm of color, of the life of the plant and of the animal. How could the ceramists have resisted the temptation to utilize a repertory so rich and so prodigiously varied, as that offered by the entirety of the work of the old civilizations of the Orient? The clay of the vases to be decorated afforded spacious fields of many shapes, on which the b brush could play in full liberty, the material being of too little value, that its attempts should be of importance, even if unfortunate and soon rejected.

These attempts did not fail to be multiplied when the potter felt himself encouraged by the rope of the pleasure of creating novelties. Taste for the use of painted pottery was hereditary among the Greeks for several centuries. On the other hand, as soon as commercial relations were formed with the so-called barbarous peoples, what could be offered them, better made to tempt them that well burned pottery, elegant in form and ornamented by colors that pleased the eyes and designs that excited curiosity? This pottery both convenient for use and of pleasing appearance would have every chance to be substituted easily for the rude pottery, the only kind that those poorly equipped societies were in condition to make. The Phoenicians dervved great profits from pottery which they sold on the coasts and in the islands of the Atlantic, to the Iberians and the Celts of western Europe.[1] The Ionians did the same in the Mediterranean and in the seas extending toward the northeast. They had inaugurated this commerce after the middle of the 8 th century. According to ancient chroniclers, to that date ascended the founding of the colonies that they had scattered over the shores of the Propontis and of the Euxine.

Note 1.p.554. Strabo. III. 5-2.

Hence Ionian genius had acquired and displayed all its force of expansion. In ttose cities in full flight of faith, the nobles by birth and wealthy shopowners led a brilliant and luxurious life. This is known by many authentic evidences.[2] The sumptuousness of costumes and of repasts was carried very far. One could not require the potter to put some grace and beauty into the vases, that appeared on the tables before which the

guests, decorated by clothing in which purple was mingled with the whiteness of linen, were extended on couches that were costly furniture, fashioned with taste and of very careful design. Those art vessels further contributed as articles for export to the wealth that supplied the elements of this luxury, whose splendor was enhanced.

Note 2.p.554. Fragments of the poets Arios and Xenophanes in Atheneus. XII, p. 525, 526.

In these conditions, we have every reason to believe that it is proper to carry to even the 8 th century the beginnings of Ionian ceramics, of that represented by what we have called t the first Rhodian style, by the vases whose decoration imitates that of the oriental tapestries and chased cups. Henceforth Ephesus and Miletus were great markets, to which by land and sea came all exotic wares, embroidered fabrics,rugs, ivories, goldsmith's works and glazed terra cotta, then to take the route to the West. The Corinth of the Bacchiades about this time was very active and prosperous; but its industry and commerce had not yet taken the development assured to it in the second half of the following century by the spirit of enterprise and the energy of Cypselos and of Periander. The Peloponessus was also much more distant than Ionia from that Orient from whence came to Greece the vivifying and renovating impulses. Corinth did not receive at first hand, as did the cities of t the Asian coast, the models that by the diversity of the representations that they gave of the various forms of life, led the Greek artist to reproduce those forms. As for Athens, men were much less advanced there than at Corinth. Isolated in its sterile territory and without a navy, Athens then had no views on the exterior. When in the other provinces of the Hellenic world, men began to interest themselves in the suppleness of the flesh, the Attic potter remained behind in the stiffness of the style of the Dipylon, which hardened and petrified in a way the forms of the animal and of the man.

Here is what confirms the observations that we have just presented, what induces the recognition of Ioniau potters in a r right of priority, to think that they had been first to divine and to sketch the role that the ceramic painter would play in the art of that Greece, which was going to make the clay of its vases the confident and depositary of such a great part of its

religious and poetical conceptions.[1] However little in a museum of antiques one glances at the glass cases in which are exhibited the long series of the painted vases of Greece, he notes there scattered among the figures and running in all directions, inscriptions traced with the brush. Then if one reamines the labels placed on these cases, he verifies that the vases on which abound these legends are Corinthian or Attic vases. When he stops before the case that encloses the vases of Naucratis and of Rhodes, or even those hydrias of Caere that archeologists believe issued from some Ionian workshop, the appearance is entirely different. No inscriptions beside those images. The visitor is compelled to divine the subject of the painting from what he knows of the Greek myths and of the translation that sculpture usually gives to each of them. What may be called the dumbness of Ionian ceramics has only one explanation. If the Ioniau painter wrote little on the clay, we have to seek the reason of this abstinence in the state of the society in which he made his apprenticeship.

Note 1.p.555. Potties also admits this anteriority of Ionian pottery, while only carrying it to the beginning of the 7 th century. (Catalogue. p. 149).

In the 8 th century, when the ships of Miletus were already loaded with the products of its industry and sailed across the Egean sea and the Euxine, the principle of alphabetical writing was known in Greece. Greece had its alphabet or rather its alphabets; for the alphabet differed from one province to another, and often from city to city in the same province; but although everywhere men were occupied in adapting to the sounds of the Greek language the characters that they borrowed frsm the Phoenicians, very little was yet written in Greece. This is proved by the small number of texts engraved in stone or bronze, that Epigraphists believe it right to refer back to this epoch. In each city there must have been only professional scribes able to use the new invention to fix thought and preserve the memory of the past. As for the workmen, they knew neither how to read or write. The Ionian ceramic painter at the time of his beginnings could not then have the idea of inserting in his paintings letters and words. He dispensed with them and persevered in that habit, when once adopted. He placed inscriptions on his vases only very late, when for a long

time the example of those legends had been given to him by other works, and still he only followed that example with regret on very rare occasions.[1] When in their turn the kilns of Corinth were lighted, men already more commonly used writing, and they saw appear on vases inscriptions, artists and signatures and names of personages. In the Athens of the 6 th and 7 th centuries, primary instruction, as we should say, was still more extended. Inscriptions were multiplied, lengthened anf diversified. The painter was no longer satisfied to explain the subject of the painting by adding names given to the persons. he takes the clay that he decorates as a confdaut of his admiration and love, sometimes of trade jealousies whose expression escapes in its malice.

Note 1.p.556. We find to cite here only 3 or 4 Ionian vases that bear inscriptions, the Rhodian plate of Euphorbus, the Cyrenean cup of Arcesilas, the cup of Phineus and finally the gigantomachy of an amphora of the Louvre (Hall E, 732). Again this last vase belongs to the list of vases that Pottier calls Attico-Italian, because of the influence of Attic models that are felt there.

If inscriptions are very common elsewhere and are almost entirely wanting on the works of Ionian ceramics, this is because that was born, its practices and traditions of the workshop w were established before artisans had learned to write and their patrons to read. Ionian vases do not speak to the spectator l like those of Corinth or Athens, and this silence of the brush concurs with other indications in allowing it to be affirmed, that in this country as in other domains, those were Ionians who gave the signal for the fertile invention and showed the way to their compatriots, the European Greeks; but this is not alone by the title of being oldest that this ceramics merits being studied more closely that it was by the first historians of Greek art. It has an originality that places it apart, which is manifested both by the spirit that the painter carries into the composition of his paintings and by the taste that he shows for the vivacities and contrasts of color.

In the first part of this study, we were compelled not to a appreciate or to define the Ionian industry of vase painting only till after its products had come to us, that were found in the eastern basin of the Mediteranean, even on the site or

[illegible]

most clearly distinguished from the ceramics of western Greece, but these vases by vases alone do not represent all the work [illegible] painted pottery, all entirely composed of pieces taken from I[talian] Italian cemeteries, which by one of those chances so numerous in the history of the excavations, alone represent the efforts and creations of certain workshops, most flourishing and most [p]ractical in Ionia. Certain of these vases, like the ones attri- [illegible] cylixes of Caere, appear to be later than most vases discover- ed at Rhodes and Samos, Naucratis and Daphnae; they make known to us a more advanced stage of this industry and what seems to be the result of the ultimate development, what might be call- [illegible] te of the Ionian ceramists, but to extend and complete it, to add some traits to those that we have furnished. From the mon[uments] [illegible] nes could have exerted some influence on it and induced it to modify its processes of execution in a certain measure.

The examination of the so-called hydrias of Caere and of oth- er vases of the same kind confirms what we have said of the complaisance with which the Ionian painters introduced in the- [illegible] es of which had already been found in the repertory of Mycena- ean artists, other types of which in greater number were offer- ed to them by that of the oriental artists. These are the sir- en-bird with two human arms and the man with a lion's neck and the tail of a horse;[4] as on the monuments of archaic sculpture [illegible] and the deities with two pairs of wings;[5] as on the celebrated monument of Xanthos, the evil and devastating harpy.[6] The type affected by the Ionian painter is that of the Sirens or rather, as one would call them, characterized by a broad [illegible]

[illegible]

bear the workshops from which it issued with the mark of the shop, if we may so speak. From them we have demanded what were the original characteristics of this caramics, by which it is most clearly distinguished from the ceramics of western Greece; but these vases by vases alone do not represent all the work of the Ionian potter and painter. We have proved that there is reason to regard as coming from the same art other series of painted pottery, all entirely composed of pieces taken from I Italian cemeteries, which by one of those chances so numerous in the history of the excavations, alone represent the efforts and creations of certain workshops, most flourishing and most fruitful in Ionia. Certain of those veses, like the cups attributed to Cyrene with all probability and like the so-called hydrias of Caere, appear to be later than most vases discoveret at Rhodes and Samos, Nauchatis and Daphnae; they make known to us a more advanced state of this industry and what seems to be the result of its ultimate development, what might be called its last word. In these conditions, we are held not to correct the definition that we have given of the technics and taste of the Ionian ceraimists, but to extend and complete it, to add some traits to those that we have furnished. From the most ancient and the simplest of these monuments, on which Ionian genius found its expression, before Corinthian and Attic ceramics could have exerted some influence on it and reduced it to modify its processes of execution in a certain measure.

The examination of the so-called hydrias of caere and of tther vases of the same kind confirms what we have said of the complaisance with which the Ionian painters introduced in their pictures those factitions by a composite form, many examples of which had already been found in the repertory of Mycenaean artists, other types of which in greater number were offered to them by that of the oriental artists. These are the siren-bird with two human arms and the man with a lion's head and the tail of a horse;[1] as on the monuments of archaic sculpture,[2] the centaur with two human legs in front;[3] the winged bull,[4] and the deities with two pairs of wings;[5] as on the celebrated monument of Xanthos, the evil and devastating Harpy.[6] One type affected by the Ionian painter is that of the Silenus or satyr, as one would call them, characterized by a broad bestial face, a horse's tail and hoofs.[7] The winged bull with human head, the

bull of the palaces of Chaldean and Assyria, has not yet been found on the vases, so far as we know; but new discoveries w will perhaps cause to be found some day. The proof is made that the Ionians knew this type. It has just been indicated on a stater of electrum of Miletan weight, that was purchased at Smyrna and has entered a Paris collection.[8]

Note 1.p.558. Louvre. Hall E. 723.

Note 2.p.558. Histoire de l'Art. Vol.VIII,p.266, Fig. 102.

Note 3.p.558. Louvre. Hall E. 700.

Note 4.p.558. Fig. 252.

Note 5.p.558. Fig. 266.

Note 6.p.558. Fig. 267.

Note 7.p.558. Fig. 268. On all these factitious beings see Karo. Zu den altgriechischen Fabelwesen. (Strena Helbigiana. p. 148-154. 1900).

Note 8.p.558. E. Babelon. Congres numismatique de Bruxelles. p.562-564. Pl. XXIX, 1).

Personages purely human also present distinctive traits. In the painting of the Komos or Bacchic dance, the Ionian hand is recognized by a particular ardor of the movements and by the entire nudity of the persons. (Fig. 219 and Vignette at end of Additions and Corrections).[9] In scenes with draped persons, m men and women wear shoes with recurved points and conical caps known to be of Ionian fashion by comparison with Asian monuments.[10]

Note 9.p.558. Louvre. Hall E. 737, 738.

Note 10.p.558. Pottier. Catalogue. p.507.

"The structure of the persons is generally massive. The proportions of the body are short with great heads and strong thighs. The waist appears rather high. With a certain thickness of color in the red and white retouches," this appearance contributes to give Ionian paintings a slightly heavy aspect, that contrasts with the dry clarity and elegance of Attic paintings."[11] This tendency of a certain softness, to certain heaviness of forms, we have already noted and indicated in the w works of Ionian sculpture.[1]

Note 11.p.558. Pottier. Catalogue. p. 509.

Note 1.p.559. Histoire de l'Art. Vol.VIII, p. 418.

On the other hand the persons here have less stiffness and solemnity than on the vases of the continent. As can be judged

by the dances of ephebes that we have reproduced, they run and act with more freedom. There may be cited for the same purpose certain combats of Hercules, of Centaurs and Lapithes.[2] There is also more gaiety and spirit in the arrangement of the scenes. Nothing is more innocent than the air with which the little Hermes sleeps in his cradle, while the followers cause the theft of the oxen of Apollo, a theft of which the wily infant is the author (Fig. 257). Elsewhere is Eurystheus to whom Hercules leads Cerberus, that he has charmed in the execution of an order received. In seeing come to him the hero armed with his club and the monster with three heads, Eurystheus is struck with fright. He conceals himself in a great jar of terra cotta, from which project only his head and hands, that make a gesture of terror (Fig. 256).[3] The composition of the cup of Arcesilas presents the same merits in a higher degree. Still is the same tendency marked in the traits given to Hephaestos by the brush of the Ionian painter, who has represented him as returning to Olympus under the lead of Dionysos, after the long exile in the depths of the earth to which he had been condemned by the wrath of Zeus.

Note 2.p.559. Louvre. Hall E. 662, 700.

Note 3.p.559. Louvre. Hall E. 701.

The Attic painters loved to treat this theme and gave to Hephaestos there an aspect, whose nobility does not distinguish him at first view from the other deities that welcome him. A hydria of Caere on the contrary offers us in this scene the strange and realistic figure of an infirm deity with twisted feet (Fig. 277).

It is the taste for the thing seen for amusing and singular detail, that explains the simplifications and methods that one scarcely finds in the ceraimics of western Greece. Here the painter has cut in two the body of a wild boar, of which we perceive only the monstrous rump (Fig. 278). There he shows t the herd of cattle concealed in a cave (Fig. 257). Everywhere in the mythological scenes that he traces, he permits to appear the pleasure that he takes in indicating the accessories a and in defining the external decoration. In the painting of t the abduction of Europa, he represents Crete by a hill on which runs a hare and that is crowned by three trees, in which are summarized the forests that cover the mountains of the island;

a dolphin as symbol of the sea accompanies the nymph to the shore (Fig. 279). Elsewhere is a lioness at bay, that to resist the hunters and the dogs backs against a thicket represented by a small leafy shrub.[1] We have already had occasion to emphasize the various traits, all very happily chosen, by which the painter of the cup of Arcesilas and that of the cup whose principal person is the nymph Cyrene has known how to charactrize in a manner not to be confused with any other, the medium that serves to frame the action.

Note 1.p. 560. Louvre. Hall E. 698.

The Attic painters with rare exceptions appear to have been scarcely interested except in the humau figure. On the contrary, it seems that the Ionian painters have cast a more curious glance at nature, that they have been sensible to the grace of the plant, to the beauty and variety of the forms of animals, to the incidents of the country. To say all in a word, in the works of Ionian ceramists the painting is less pure decoration than on the vases of Corinth and less sculptural than on the vases of Athens; it is more picturesque.

We have studied the Ionian ceramics in the entire effort of its production, from the most ancient of its works that have come to us until the time when both by the effect of the disasters that struck the Asian Greeks and by that of the progress of Attic art, Ionia found itself deprived of the role of leader that she had enjoyed so brilliantly, for the three centuries that preceded the great struggle of Persia and Greece. We have seen this ceramics begin with plant decoration, mixing with it some elements of that natural geometrics which begins spontaneously everywhere, but which is not the Dorian geometric style, whose climax is represented by the pottery of the Dipylon. Then came the richer compositions into which enter animals and persons; but even then, the painter does not reject the use of the plant, its foliage and inflorescence. The plant continued to furnish the unique ornamentation of certain pottery of moderate importance; but on the great vases it was relegated to the second plane, and has yielded the best place to the bands of animals staged one over the other on the oenochoes of Rhodes and on Ionian crateras. In their turn the animals have retreated before the invasion of the human figure and have taken refuge in the lower parts of the painting, as on the sarcophaguses

of Clazomenes and the Ionian amphoras of Italy,[2] or on the reverses of vases like the hydrias of Caere;[2] elsewhere as on t the great vases of Melos and on the Cyrenaean cups, they appear more seldom. Finally they end by disappearing entirely. We come then to the beautiful series of the very advanced Ionian style, which comprises the deinos with black figures,[3] the cup of Phineus and the amphora of the gigentomachy.

Note 1.p.561. Louvre. Hall E. 703-705.

Note 2.p.561. Louvre. Hall E. 697-et seq.

Note 3.p.561. Louvre. Hall E. 736-739.

It is important to note step by step this march of beauty. The Ionian cities were first at an end of what is termed their middle age, when was constituted historical Greece, and their art is developed more at leisure and more freely than that of the other families of the Hellenic race. It has borrowed more from the past, the distant past of the Mycenaean world. On the other hand, it was in position to draw more largely from oriental sources, to take there more directly and at first hand all that it pleased to make its benefit. Due to the advance of which it was assured, it did not risk being turned aside from its route by the influence and pressure of other schools, whose p prestige and ascendency would be imposed on its taste. It was in the campaign and the charm of its pace was regulated only by its fancy, or rather by the secret bent of the genius of w which it was the expression and by the knowledge that it had of the needs to which it was charged to reply. The different stages of that long evolution are distinguished here more clearly than in the work of schools that came later. We comprehend better in what order these phases succeeded each other from the starting to the ordinary points. This order is that in which were naturally produced the manifestations of the plastic faculty among peoples or individuals well endowed for the arts of design; we shall then find it again in large part in other ceramics; but it will be less apparent, because there is for example in Attica other opposing influences of more ancient industries already accredited and consecrated by success. Better than its rivals and its heirs, Ionian ceramics then allows us to define the normal phases of this organic development, a and to investigate the laws by which these phases succeed each other and are connected.

Even more than themes and methods of composition, what characterizes Ionian ceramics and by which it differs especially from other Greek ceramics of the classical age is its very marked taste for polychromy. To consider in its entirety the work of the Greek potter, this is first striking. This potter has started from a conception which is not that of his more illustrious rivals. From the arts of clay and of fire, he has not demanded the kind of effects and of beauty desired by the potters of the extreme Orient and those of modern Europe. He is before all on the play and splendor of color, vivified and fixed by the flame, that counted for charming the eyes, the master workman to whom is due the porcelains of China and Japan, the Hispano-Arab plates, the Italian majolicas of the Renaissance, our faiences of Rouen, Strasburg and Moustier, the porcelains of Sevres and of Saxony. In all these series of beautiful works, whether the painting had a subject or was pure decoration, the ceramist has never believed that he could dispense with offering to the eye as enjoyment due to it, the pleasure of warm a and brilliant tones.

It was entirely otherwise with Greek ceramics. The potter t there employed most frequently but two colors, red and black, of which one served for the ground and the other for the figures. When on the archaic vases he places on the black touches of violet, those are still in the scale of sombre tints, thus the amateur that has lived in intercourse with ceramists accustomed to praise color experiences at first sight a sort of surprise and deception, when he enters a gallery of Greek vases. Everything seems to him to have a dull and slightly sad appearance. Only at the end of a certain time does he recover and have a taste for a ceramics, that resembles little that to w which he has been accustomed. When he takes the trouble to look more closely, he cannot help admiring on the least careful of those vases the wise arrangement and the ingenuity of the composition of the paintings, as well as the elegance of the ornaments enclosing them, and especially the drawing of the figures, that by this boldness, nobility and purity, recalls that of the most illustrious works of statuary, the marbles of Polycletus and of Phidias. He admires; but he still feels himself slightly out of his element, a little anxious, and we must confess that uneasines felt has its reasons.

of intelligent and [illegible], the [illegible]
himself the pupil and imitator of the sculptor, who ornamented
[illegible]
ornamented by his frescoes the walls of public edifices, and later
of the most exercised easel painters or panels of wood. What
he proposed was to project on the sides of his amphoras and
in the hollow of his cups the faithful reflection of the [illegible]-
ry that these masters had created; this was to conform himself
to the interpretation which they had given of the living form,
and to reproduce as in the accurate reduction the types, [illegible]
[illegible] attitudes, presented to view in the masterpieces of great
artists. What he sought in the method pursued was to succeed
[illegible] in placing in his best works a sufficiently exact [illegible],
that we may believe ourselves authorized to seek there somewhat
the reductions, almost copies of certain celebrated paintings
[illegible]
and that he satisfied it, our curiosity finds there its profit.
It is thus we permit ourselves to believe that we have not en-
[illegible]
[illegible] than in studying, according to the statements of the
ancients. There is a science complete for us; but as for the [illegible]
potter, the preoccupation that he obeyed might have an influ-
ence on the manner in which he understood the practice of his
art, that led him to aspire to certain beauties and certain e-
ffects, that everywhere else the ceramists have sought and o-
obtained. He who painted or rather has drawn on the clay like
the masters of the cities, from which he demanded his models
painted on the plastering of the wall or on the cedar board.
Andocides and Douris were potters, who in spite of the very
modest situation that they occupied in ancient society, merit
rank in the series of famous artists, that the ancient writers
most extolled, all whose work has perished; but they were not
ceramists in the true sense of the word.

This title of ceramist, why is it judged right to contest it
for such skilful and also accomplished workmen, or at least [illegible]
to accord it to them except with certain reserves? This is be-
cause they are not required to satisfy certain conditions, [illegible]
[illegible]
these were imposed on them by an esthetic instinct, the artists
who practised the same trade. The Attic potter whose vases [illegible]

By intelligent and devoted application, the Greek potter made himself the pupil and imitator of the sculptor, who ornamented by his reliefs the friezes of temples, just as the painter decorated by his frescos the walls of public edifices, and later of him that executed easel paintings on panels of wood. What he proposed was to project on the bodies of his amphoras and in the hollow of his cups the faithful reflection of the beauty that these masters had created; this was to conform himself to the interpretation which they had given of the living form, and to reproduce as in the accurate reduction the types, groups and attitudes, presented to view in the masterpieces of famed artists. What he gained in the method pursued was to succeed thus in placing in his best works a sufficiently grand style, that we may believe ourselves authorized to seek there sometimes reductions, almost copies of certain celebrated paintings of Polygnotus and of Zeuxis. That he conceived this ambition and that he satisfied it, our curiosity finds there its profit. It is that we permit ourselves to believe that we have not entirely lost the art of painting, in which Greeks put no less genius than in statuary, according to the statements of the ancients. There is a serious benefit for us; but as for the p potter, the preoccupation that he obeyed might have an influence on the manner in which he understood the practice of his art, that led him to aspire to certain beauties and certain e effects, that everywhere else the ceramists have sought and o obtained. He has painted or rather has drawn on the clay like the masters of the brush, from which he demanded his models painted on the plastering of the wall or on the cedar board. Euphronios and Douris were painters, who in spite of the very modest situation that they occupied in Athenian society, merit rank in the series of famous artists, that the ancient writers most extolled, all whose work has perished; but they were not ceramists in the true sense of the word.

This title of ceramist, why is it judged right to contest it for such skilful and also astonishing workmen, or at least not to accord it to them except with certain reserves? This is because they are not required to satisfy certain conditions, that have been accepted everywhere else with joyous alacrity, as if these were imposed on them by an assured instinct, the artisans who practised the same trade. The Attic potter whose vases with

red figures summarize and crown the entire effort of Greek ceramics, did not seem to have had a very clear perception of the relation, that must exist between that purpose of the object and the character of the decoration received by that object. It is that the decoration of a vessel as the decoration of a fabric and of tapestry. Neither comprises paintings made to be regarded with sustained attention, paintings that interest the mide by the choice of the subject and by the perfection w with which are rendered there the beauty of the human figure and the expression of the lines of the face. The place of these paintings is not on the fabric, that is deranged and wrinkled by every movement of the body clothed by it, nor on the rug crushed by the feet, nor in the hangings that the arm lifts to pass a doorway. No more is it on the plate on which is placed the food or in the cup, that is filled with liquid and passes from hand to hand. What is everywhere most appropriate to the part that the object in question plays in domestic life is a decoration composed of fanciful images, that rise in warm a and varied tints from the ground, and amuse the eye without s seeking to retain it and to provoke reflection. Those brilliant tints with their entire scale of vivid and light noter, the t tub of the dyer places them at the command of the weaver and the embroiderer. As for the ceramist, he finds in the use of glazes and in the flame of the kiln the means of making all t the magic of color resplendent on the gray of the clay.

What avail these effects of color end what part is due to f fancy in the decoration of vases, the ancestors of the historical Greeks had by intuition. In the Crete that is called Minoan,to give the impression of remote antiquity, a very boldly colored pottery has been revealed to us by the vases of Camaris. Likewise the Mycenaean painter,with the borrowings made f from the marine fauna and flora, gives to his decoration a character of capricious originality, which makes it very different from that in which Greek ceramics ends. Men speak of its Japanism.[1] Ionian pottery, while already having other ambitions, still remains in certain respects less distant from these tendencies and traditions, than are the Corinthian and especially the Attic pottery. In what we have termed the first Rhodian s style the entire decoration of the vase with its lotus flowers and files of real or factitious animals is pure decoration, a

of an ornamentation whose principle is that of the enamelling of cloth and of tapestry. We have shown elsewhere what diver-
[illegible]
[illegible]
[illegible]
not what particularly connects him with his greatest predecessor and what distinguishes him from his successors. In the v
marked sense that he has for color. This sense is first shown-
[illegible]
coating of pale yellow, which he renounced only very late. His
[illegible]
he settles blacks and browns, vivid reds and yellows, then again a white glaze. He has even gone so far as sometimes to
[illegible]
the [illegible]. If we have been able only to reproduce in black the cylinders in which blue takes the greatest importance (Figs. 256, 257, 269), this is very clearly indicated in the colored transcriptions of these paintings.[1] In the cup of Arcesilas are traces of a greenish blue on the hat of the king, on the tunic of the inspector placed before him, on the bands and c caps of the two servants that pile the sacks at the bottom of the hold. Our draftsman has indicated some of these traces; b but others have escaped him. This is because wherever these p painters employed blue, they have used a color that has not held and has badly adhered to the clay.

Note 1.p.[illegible]. Pottier. Catalogue. p. 140.

Note 1.p. 8[illegible]. In our Fig. 267, the white parts of the rosettes on the columns of Hermes and on the himation of [illegible] represent a blue that tends to green. On the petals of the great rosettes of our Fig. 268 the same blue alternates with red from petal to petal. It is required in our engraving by crossed hatchings lighter than those corresponding to red.

On the other hand, our colored plates give a correct idea o the polychromy of Lesbian vases (Pl. [illegible]), weakened by the use of the light glazes, it presents a tranquil harmony that has the charm for the eyes. The polychromy is still very quiet in the cup of Arcesilas, where the workman has employed the same coating (Pl. XV). In the absence of what it has more [illegible] almost hardness in the vase of Busiris (Pl. XXI), whose [illegible]-
[illegible]

of an ornamentation whose principle is that of the decoration of cloth and of tapestry. Ve have shown elsewhere what pleasure the Ionian ceramist, even when he extended his programme, always seems to take in recalling that man is not to him all of nature, in reserving in his paintings some place for landscape; but what particularly connects him with his distant predecessors and what distinguishes him from his successors, is the very marked taste that he has for color. This taste is first emphasized by the mode that he has taken to place on the clay that coating of pale yellow, which he renounced only very late. This coating gives him a very soft tone for his grounds, on which he applies blacks and browns, vivid reds and yellows, then again a white glaze. He has even gone so far as sometimes to place touches of blue in his rosettes and on certain parts of t the drapery. If we have been able only to reproduce in black the paintings in which blue makes its discreet appearance (Figs. 236, 237, 249), this is very clearly indicated in the colored transcripts made of these paintings.[1] In the cup of Arcesilas are traces of a greenish blue on the hat of the king, on the tunic of the inspector placed before him, on the tunics and c caps of the two servants that pile the sacks at the bottom of the hold. Our draftsman has indicated some of these traces; b but others have escaped him. This is because wherever these p painters employed blue, they have used a color that has not held and has badly adhered to the clay.

Note 1.p.566. Pottier. Catalogue. p. 190.

Note 1.p..67. In our Fig. 237, the white parts of the rosettes on the chlamys of Hermes and on the himation of Maia represent a blue that tends to green. On the petals of the great rosettes of our Fig. 259 the same bcue alternates with red from petal to petal. It is required in our engraving by crossed hatchings lighter that those corresponding to red.

On the other hand, our colored plates give a correct idea of the polychromy of Ionian vases (Pl. XIX), weakened by the use of the light glazes, it presents a tranquil harmony that has the charm for the eyes. The polychromy is still very quiet in the cup of Arcesilas, where the workman has employed the same coating (Pl. XX). In the absence of that it has more freedom without hardness on the vase of Busiris (Pl. XXI), whose appearance recalls that of certain modern pottery.

Therefore the Ionians, perhaps by the effect of a sort of atavism, or even rather under the influence of the monumental painting in which they sought their models, had engaged Greek ceramics in a course not entirely that which this ceramics continued to follow, and in which it produced paintings that passed for its masterpieces. Ought we to regret that this art thus deviated from the path traced for it by its beginners? One dares not speak of regrets when he has beneath his eyes the beautiful Attic vases of the 5 th centurw; but we do not owe less to the Ionian artists than to recall that in a certain sense,, they perhaps had a more correct feeling than other Greek potters concerning the conditions to which must correspond the c ceramics, that does not lose sight of the special nature of t the material in which it works, and the use which must be made of the vases that it creates.

CHAPTER XXI. CORINTHIAN CERAMICS.

1. By what signs is recognized Corinthian Ceramics.

In the course of our studies of Ionian ceramics we have had occasion to state that fragments of Corinthian vases have been collected in notable quantity in the cemeteries of Rhodes. They have been gathered there in greater number than the fragments of Attic vases. This predominance of the Corinthian article, as we should say, gives reason to think that export of Corinthian vases and their introduction into Rhodes must have commenced much before the first Attic vases with black figures came there.

The inference that can be derived from the result of the excavations is found to be otherwise confirmed by history. Athens in the 7 th century was governed by the aristocracy of great landed proprietors, and remained almost foreign to the life a and movement of the Greek world. It was entirely different with Corinth. Power was there in the hands of the chiefs of the family of the Bacchides, and thus had the tastes and behavior that the historian will find in modern Europe among the nobles of Venice. Like them the Bacchiades were bold promoters of commercial and colonial enterprises. They placed in the sea ships which they armed for trade, and at need for racing. On the eastern and western coasts of the Adriatic, where the Corinthian merchants were engaged in forming relations with the Illyrian tribes and those of the coast of Italy, they founded agencies to open outlets for the industries of Corinth.

Among the industries that concurred in enriching very quickly the city of the isthmus, none was born earlier and developed more rapidly than that of ceramics. If there be one commodity that civilized people may always be certain to place with advantage among less advanced tribes, whose tools are still very imperfect, this is a convenient vessel of a pleasing appearance, vases well burned and with rather showy decoration. The Corinthians could offer this very early to the patronage created on the coasts which they frequented. A tradition transmitted to us by Pliny attributes to the Corinthians the invention of the potter's wheel. It was certainly erroneous. There is already a mention of the wheel in the Homeric poems;[2] but in that history we must indeed give the second place to Corinthian ceramics. This [illegible] not only

Corinthian ceramics. This ceramics had only acquired some importance very much later, when after at least a century, the p potters of Corinth were the recognized furnishers of all Greeks or barbarians, that had a taste for painted vases and who paid the price. This is attested by the excavations, wherever made in the basin of the Mediteranean.[3] They evidence the activity that was very rapidly taken at Corinth by that industry and t the export that it supplied.

Note 1.p.580. Pliny. H.N.VII, 57.

Note 2.p.570. Iliad. XVIII. 600.

Note 3.p.570. For a brief indication of the primeval sites on which have been found Corinthian vases, see Pottier. Catalogue. p.419-420. See Willisch. Die altcorinthische Thonindustrie. p. 108-109. 1892.

On the coasts of all the seas frequented by the Greek navy, from Carthage and Cyrene to the Tauric Chersonesus and the Hellenic cities of southern Scythia, from the shores of Asia Minor to those of Sicily and of Italy, as well as to the end of the Adriatic and even north of the Alps, at various points in Germany, this ceramics appeared, here in the form of scattered fragments, there as numerous and varied vases; but it is everywhere represented by fragments or by pieces well preserved. In the time of its greatest vogue, Attic pottery had perhaps obtained from its foreign purchasere higher prices because of its art value than Corinthian pottery; but it does not seem that even then it had been distributed in such great abundance in all the markets of the ancient world. By the quality of their products, the workshops of Athens held the first rank and occupied the place apart; but from the volume of clay shaped on the wheel and burned in those two industrial centres, the workshops of Corinth had no rivals.

When men commenced the work of classifying painted vases, t the pottery of Corinth was the first to which could be given a regular civil status. It was known from the ancient authors that the arts of clay, like those of metal, had been one of t the factors of the marvellous prosperity of Corinth. Its clay was praised for the facilities that had been offered to the w workmen.[1] Roman colonists were sent to Corinth by Julius Cesar in 4. B. C. to restore the city destroyed by Mummius. They found it profitable to excavate the cemeteries to obtain the vases

of metal and of clay. Cicero scornfully called the latter [illegible] [illegible]:[4] [illegible] [illegible] for this pottery as for bronzes.[3]

Note 1.p.571. Pollux. X. 182.

Note 2. [illegible]

Note 3. [illegible]

Near Corinth have been found the beds of clay from which the artisans of that city formerly derived all their pottery. It is a clay soft to the touch and as if soapy. The local potters still use it to make common vases. On leaving their kilns, it has that slightly greenish tone of yellow that the material [illegible] [illegible].

What will suffice to show the part which this clay industry played in the life of the Corinthian people, are the images that decorate those votive plaques found in the suburbs of Corinth, that we have already described.[4] Several of them are offerings of potters represented there in various ways in the exercise of their trade. Here it are where are seen the country-men occupied in digging the bed of clay that served for making the vases (Fig. 250). One of them with his muscles stretched [illegible]; another is handing the one who piles it in a basket. From the bottom [illegible] a companion, who takes it in his hands. Above the pit is [illegible] [illegible]. [illegible] work is no less severe for those who burn this clay. Now like the [illegible], the man armed with a long poker stirs the fire of a kiln for the pottery (Fig. 251).[5] The kiln is covered by a dome and has three openings at base, a large one that serves for admitting air; at mid-height is a smaller one, closed, and finally at top is the hole by which escapes the flame. On a plaque, more than half of which is lost, is seen the workman armed with a great hook or a bar of iron, who climbs a ladder placed against the dome of the kiln, from which escapes at the top a jet of fire and of smoke. The time fixed for the burning has arrived; he is going to demolish the structure by [illegible]

of metal and of clay. Cicero scornfully called the latter the "Corinthan chamber pots;"[2] but their vogue was yet very great at Rome until the time of Augustus, and men there paid as dear for this pottery as for bronzes.[3]

Note 1.p.571. Pollux. X. 182.

Note 2.p.571. Cicero. Paradoxes of the Stoics. V.

Note 3.p.571. Strabo. VIII, 11, 23, Suetonius. Augustus.70.

Near Corinth have been found the beds of clay from which the artisans of that city formerly derived all their pottery. It is a clay soft to the touch and as if soapy. The local potters still use it to make common vases. On leaving their kilns, it has that slightly greenish tone of yellow that the material presents in the fracture, when one examines the fragments of antique vases that come from Corinth.

What will suffice to show the part which this clay industry played in the life of the Corinthian people, are the images t that decorate those votive plaques found in the suburbs of Corinth, that we have already described.[4] Several of them are offerings of potters represented there in various ways in the exercise of their trade. Here is one where are seen the quarrymen occupied in mining the bed of clay that served for making the vases (Fig. 280). One of them with his muscles strained f for the effort attacks the clay with great blows of his pick; another is behind him and piles it in a basket. From the bottom of the trench, a third laborer lifts the filled basket to a companion, who takes it in his hands. Above the pit is the amphora, doubtless suspended from a bar; it conta ns water to refresh the men occupied in this hard labor in the sun. The work is no less severe for those who burn this clay. Now like the diggers, the man armed with a long poker stirs the fire of a kiln for the pottery (Fig. 281).[5] The kiln is covered by a dome and has three openings at base, a large one that serves for admitting air; at midheight is a smaller one, closed, and finally at top is the hole by which escapes the flame. On a p plaque, more than half of which is lost, is seen the workman armed with a great hook on a bar of iron, who climbs a ladder placed against the dome of the kiln, from which escapes at the top the jet of fire and of smoke. The time fixed for the burning has arrived; he is going to demolish the structure by beg-

beginning at this top (Fig. 282). Of all the operations comprised in this industry, scarcely one is not found represented h here. Several plaques show us the potter seated on a stool before his wheel, who fashions with a roughing tool the little aryballa painted at bottom, placed on a wheel that he moves w with his hand. In the corner are lumps of kneaded clay, and hanging above on the wall are two aryballas like that being finished by the workman. Thus we see the entire workshop (Fig. 283). [1]

Note 4.p.571. Histoire de l'Art. Vol. IX, p.237-247; Figs. 99-113.

Note 5.p.571. See Antike Denkmäler. I, 1,6a,12,22,23.

Note 1.p.572. The same. Pl. VIII, 17, 18.

The vases themselves confirm the inferences that we have drawn from ancient evidence, of the existence of beds of plastic clay and of paintings presented by many votive tablets. On vases of which many have the same forms as those represented on those tablets are read brief legends. In a number are signatures of potters; but none of them has added the ethnic adjective to his name, some examples of which are elsewhere, nor the indication of the city where he was born and where he worked. On the other hand, all these inscriptions, that if placed end to end would give hundreds of words, are written with an alphabet known by the lapidary inscriptions and by the coins, and was the archaic alphabet of Corinth. This alphabet has three or four characters that especially belong to it, and that do not allow it to be confused with any other of the systems of writing used in Greece about the same time.[1] They are the epsilon, iota, beta, sigma, gamma and the digamma. (See p. 573 for the shapes). finally one meets everywhere the kappa that reappears at all times as the initial of the name of the city, on coins struck at Corinth. Among these inscriptions are some written in lines recurved at their ends to continue in the opposite direction, turning like the ox laboring in the field. (Boustrophedon). The writing sometimes goes from right to left in the direction of Phoenician writing, and sometimes from left to right in the direction later taken by all Greek writing.

Note 1.p.573. On the Corinthian alphabet, see A. Kirchhoff. Studien zur Geschichte des griechischen Alphabets. 3 rd edit. Sect. 26. p. 88-97 and Pls. I, XV; Article Alphabetum by Fr.

Lenormant in Daremberg and Saglio. Vol. I, and table on p. 199. S. Reinach. Traite d'epigraphie grecque, table on p. 186-188. A. Dumont. les ceramiques de la Grece propre. Vol. I, p. 240-244. Willische. die altkorinthische Thonindustrie. 148-149; p. 168-174.

These peculiarities of the Corinthian alphabet have permitted the recognition of the Corinthian vases and the forming of a very definite series, when it was still in the uncertainty of the origin, that it was agreed to assign them to other important groups of painted vases. Doubtless, most vases that have been classed under this title bear no inscription, but the clay, forms and decoration are those of the vases with legends. The resemblance is sufficiently striking that nearly always one can without hesitation arrange these anepigraphic vases in the series of those where the letters are seen, whose presence in the legend is equivalint to a mark of fabrication.

2. The so-called Protocorinthian Vases.

Before commencing the study of those vases, whose attribution to the workshops of Corinth leaves no place for doubt, it is proper to mention a list of vases, that men have taken the habit of calling protocorinthian.[1] The use of this term might lead to unfortunate confusion: it is then important to explain in what sense it has been understood. It is only after having studied the whole of the vases to which it has been applied, that one will feel himself able to state in what fashion and with what reserves the historian can continue to make use of it.

Note 1.p.574. Furtwängler seems to have been the first to use this term. (Bronzefunde aus Olympia.p.46, 51. Arch. Zeit. 1883. p. 154).

If one takes the method of designating by this label the only vases which one would have serious reasons to regard as having left Corinthian workshops, there would be no material for discussion. but it is far from always being so. This term has been frequently applied to vases, whose clay is not that of Corinth.

A certain number of vases so named were even found at Corinth or in one of its principal colonies.[1] Between them and the uncontested products of Corinthian industry, there are real analogies of clay and fabrication. The two groups are connected to

together by pieces that seem to form the transition between them. On the other hand, there have been discovered in many o other sites of European Greece and of the islands dependent on it, many vases that in form and decoration are nearly similar to those in which there is reason to see the first pottery, that issued from the kilns of Corinth.

Note 2.p.574. See the catalogues of the principal museums; but whatever the source of the pieces, what is significant is, that in many of them is recognized the clay of Corinth.

The vases grouped in this class still so badly defined present one common observation. They are all small vases, alabasters or aryballas, sometimes pyxes or boxes with covers, jugs with long or short necks, skyphoi or cups with two handles. T The decoration is then very elementary and nearly always comprises only purely linear motives. At most there are seen to appear very conventionalized plant forms, such as the palm leaf or the isolated figures of birds or of other animals, that still show the stiffness of geometric design. Sometimes is found the old theme of the hunt of the hare.(Vignette at end of the Chapter). It even occurs that the hare is omitted. The initial motive is no longer reproduced except by the running dogs. These very reduced dimensions and this poverty of the ornamentation give to all this pottery a family air.

There have been found at Corinth itself some specimens of t the vases in question. These vases are cylindrical flagons, w where they have the form sometimes designated by the term "kotyliskos","sometimes by lecythe. This is truly merely a variety of the alabaster.[1] Here is an example (Fig. 284). On the s side of this flagon is seen running a quadruped of entirely c conventional design. As for the other pieces from the same source seen there, we know them only by brief descriptions. It would then be elsewhere at Syracuse in Sicily, that we shall seek what might be the Corinthian pottery of about the end of the 8 th century. By excavations made on that system will supply us with documents much more varied than could be done by the cemeteries of the isthmus.[1] Those have been pillaged by the peasants of the vicinity and seekers for antiquities.[2]

Note 1.p.575. Colligaon and Couve. Catalogue des vases peints du musee national d'Athenes. 1902. Atlas. Nos. 397-402, 404. Furtwängler. Beschreibung der Vasensammlung im Antiquarium.

[illegible]

[illegible]

[illegible] nelle necropoli di Pucco a Siracusa nell'anno 1893. [illegible]

[illegible] course of the last century under better conditions, see [illegible]

Syracuse was founded by the Corinthians in 735. During the half century that followed the establishment of the colony, [illegible] that could not have had an independent art. It must have [illegible] its [illegible], either from the workshops of its metropolis or [illegible] workshops [illegible] by [illegible] [illegible] [illegible] of the first generations, that were installed in the island of Ortygia and commenced to profit by the advantages of one of the finest localities that could be desired for the growing [illegible] [illegible] the types to which have been [illegible]

Here are three vases of this form that can be attached to the type of the [illegible], of which they have the [illegible] [illegible]. These four vases were collected in the same [illegible]; [illegible] of them have only linear decoration. [illegible] the neck of the fourth is the image of a [illegible]. By its [illegible] it recalls [illegible] of the [illegible] placed between bands [illegible] on a [illegible] (Fig. [illegible]). [illegible] of [illegible] expanded form, the others have a little more [illegible] (Fig. 257), but [illegible] a singular [illegible] the [illegible]

[illegible] is noted the crown of [illegible] triangles; this is one of the motives most frequently employed by the decora[illegible] of this pottery.[1] This same [illegible] is found arranged in the [illegible] direction with the [illegible] of the triangles directed toward the ground on a sort of little [illegible]. (Fig. 2[illegible]).

[1] Orsi 1.p.679. See a great cratera that served for the ossuar[illegible] [illegible] Figs. [illegible], 16, 18.

(Berlin). 1885. Nos. 320,321,325,326,333,334.

Note 1.p.576. Mauceri. Relazione sulla necropoli del Fusco in Siracusa (Annalia.1887. p.37-53. Pls. A, B-E). P. Grisi. Gli scavi nella necropoli di Fusco a Siracusa dell'anno 1893. (Notizie degli scavi. April. 1895).

Note 2.p.576. On the few excavations made at Corinth in the course of the last century under better conditions, see Willisch. Die altkorinthische Thon industrie. 1892. p.3-4.

Syracuse was founded by the Corinthians in 735. During the half century that followed the establishment of the colony, t that could not have had an independent art. It must have derived its equipment, either from the workshops of its metropolis or from workshops opened by Corinthian artisans in the new city. The cemetery called del Fusco at the gates of Syracuse has furnished tombs, that according to the entire furniture contained, announce themselves as those where were buried their dead of the first generations, that were installed in the island of Ortygia and commenced to profit by the advantages of one of t the finest locations that could be desired for the growing city. We find in those tombs all the types to which have been applied the name of protocorinthian.

Here are first vases of this form that can be attached to t the type of the alabaster, of which they have the mouth and swelled body (Fig. 285). Those four vases were collected in t the same trench; three of them have only linear decoration. Near the neck of the fourth is the image of a fish. By its stiffness it recalls figures of the bird placed between bands a and vertical lozenges on a little skyphos (Fig. 286). On another cup of less expanded form, the birds have a little more suppleness (Fig. 287), but with a singular negligence the painter has placed their heads downward. On a third skyphos are quadrupeds of unusual slenderness (Fig. 288). On the bottom of this cup is noted the crown of radiating triangles; this is o one of the motives most frequently employed by the decorators of this pottery.[1] This same crown is found arranged in the opposite direction with the points of the triangles directed toward the ground on a sort of little jug. (Fig. 289).

Note 1.p.577. See a great cratera that served for the ossuary of several alabastiers. (Orsi. Necropoli del Fusco. Figs. 12, 16, 18.

ornament recall the vases of the Dipylon; but neither at Athens nor in Ionia, is found so closely combined on the same piece all the motives that we have just mentioned. There is then reason to see in this vase the product of a workshop of the coloy of Corinth, where to decorate the fields of his pottery, the artisan was inspired by various foreign models. The handles sometimes have the form given to them by neither the Attic nor the Ionian potters.(Fig. 293). This form is a sketch of w what will be taken by these handles on a type that later will be familiar to Corinthnina ceramists, that of the cratera with little columns. There have been found elsewhere in that cemetery many other remains of funerary urns. Is it probable that men would be compelled to bring from afar these heavy pieces, when there were at hand workmen skilful in modeling, decorating and firing plastic clay?

Note 1.p.580. Also at Corinth during a certain time were made vases, whose decoration was purely geometric. Fragments having this character have been found there in a very ancient cemetery quite near the fountain Pirene and described by Louise Nichols (Am. Jour. Arch. 1905. p. 411-421, Pls. XI-XVI). There are the remains of a great amphora, of several oenochoes and cups. That the brilliant black the brush has traced on a gray or reddish ground chevrons, oblique hatchings between vertical lines, circular bands, frets, etc. There have been found at Eleusis fragments of nearly similar pottery.

If one has a right to recognize very ancient works of Corinthian potters, to what workshops is it proper to attribute vases of the same kind, when neither their source nor what we k know of the history of the cemeteries where they were collected authorize us to give them a Corinthian origin? These vases are not all made of the same clay, but they have the same dimensions as those taken as types; they present the same appearance. We cannot enumerate here all the sites that have furnished pieces that are termed protocorinthian, it will suffice to indicate those where this pottery has been most largely represented in the contribution of the excavations.[1] It abounds in Argolis that touches Corinth. It had baan already mentioned at Tiryns;[2] but especially the American excavations of the Heraon of Argosbrought from the earth the fragments of these vessels; by the aid of this could be restored many entire pieces, and

Note 2.p.577. The same. Fig. 10.

Another jug has for sole ornament merely the series of circular bands close together, whites and scattered dots (Fig. 290). The decoration is also simple on a round pyxis for unguents. (Fig. 291). On another pyxis, where on the exterior are admitted only the same elements, vertical and horizontal bands, chevrons and triangles, it is complicated on the cover by adding images of animals singularly extended and deformed; it is difficult to recognize the lions that the painter seems to have desired to represent.[1] In spite of the exaggerated elongation of the bodies, the outlines of racing dogs have been better seized by the decorator of the jug with a very wide body. (Fig. 292).

Note 1.p.578. Orsi. Necropoli. Fig. 24.

All the vases just reproduced are of small dimensions and most of them must have served the uses of the toilette; but the workshops from which they came also made for other purposes pieces of much greater height, dinos or pithos that served as ossuaries. Such is the dinos in which were found two skeletons of infants.[2] The principal elements of the decoration t there are those with which the vases of the geometric style h have familiarized us. Between the two handles on each side is only one free field, a sort of metope. In one of the two panels walks a horse (Fig. 193), and in another on a broken pithos is a winged sphynx with legs folded beneath it (Fig. 294). The p part of this panel is wanting, but the head is well preserved; it is surmounted by that appendage which the ceramist painters appear to have borrowed from their Mycenaean predecessors.[1] On the top of the head rises a plume, from which is detached a ribbon floating behind, and ending in a leaf of the form of a spear head. If above the horse the border is filled by triangles, the chevrons and triangles with opposed vertices found continually on the vases of the Dipylon, the same space over the sphynx is occupied by an ornament, that until now we have found only on Ionian pottery; we mean the network that imitates a thread with mesh fixed by a great knot.[2]

Note 2.p.578. Orsi. Necropoli. Sep. D. Figs. 86, 87.

Note 1.p.579. Histoire de l'Art. Vol. IX, p. 4, Fig. 450.

Note 2.p.579. The same. p.381-382, Fig. 189.

On the other hand, the walking horse and the chessboard

from them could be drawn up the list of forms and that of the elements of the decoration. Yet this proof has not been accepted as evidence. Meeting there with such a great number of the types to which it had been the habit to attach the name of Corinth, may have claimed for the workshops of Argos the merit of having been the first to create them. It has been said that C Corinth only imitated Argos, that since the Mycenaean age it always retained a flourishing ceramics, heir of the traditional secrets of the trade, and still always prompt to follow the movement, to issue new models.[3]

Note 1.p.581. H. Prinz (Funde aus Naucratis, p. 69-70) gives a list of sites where the so-c.lled protocorinthian vases have been found in numbers.

Note 2.p.581. Schliemann. Tirynthe. Pl. XXV[6].

Note 3.p.581. J. C. Hoppin. Vases and their dragments in Argive Heraeum. Vol. II, p.57-187. In Chapter IV (p.119-155) the author studies and figures the so-called protocorinthian vases and states the theory that was suggested to him.

We cannot believe that there is reason to stop with this hypothesis. Argos and Sicyon (it was also thought at Sicyon)[4] c certainly had potters that worked for the local sale; but neither historical statements nor excavations induce one to think that either of the two cities was the seat of an important ceramic industry, carried on with a vieu to export. There have not been found in number, either on the sites of these two cities, or in Italian cemeteries, vases on which are found in t the legends characters peculiar to the Argive or the Sicyonian alphabets. There is no reason before a new order to speak of an Argive or a Sicyonian ceramics.

Note 4.p.581. Löschke. Athen. Mitt. 1897. p.262. Furtwängler. Das Heiligtum von Aphaia, p. 477. The reason given by Löschke and Furtwängler for attributing these vases to Sicyon do not merit being taken into serious consideration.

The island of Egina has also yielded many vases of this kind. There in 1895 near the site of the so-called Temple of Aphrodite was emptied a sort of well, heaped to the top with the fragments of clay vases. This must have been one of those pits, where from time to time to give place in the sanctuaries and around them, were buried the already ancient offerings that encumbered them; these deposits have preserved for archaeologists

precious times.[1] In the mass of fragments taken from this well have come from all the types of pottery, that we have studied at Corinth and at [illegible].[2]

[illegible]

[illegible]

[illegible]

[illegible] has been found one at Aleppo beside vases of the [illegible].[3] In the innumerable fragments of pottery brought to light in [illegible] [illegible] and the second Italic [illegible], there have been collected but a very small number of fragments to [illegible] in this category.[4] On the contrary, these fragments [illegible] in [illegible] and [illegible] [illegible] [illegible]. There is a very well preserved pyxis that [illegible] [illegible] [illegible] and cover, the file of [illegible] and [illegible] between the large rosette and a group of parallel lines, is an excellent specimen of the style that we seek to define.

[illegible]

[illegible]

[illegible] 132-1331).

Note 3. p.522. *Vasen aus Tanagra und verwandtes* (Jahrb. 1887. p.13-23; Pl. II).

[illegible] Sicily, at Megara Hyblaea,[1] and in Etruscan cemeteries in Italy. The Louvre possesses many of them taken from the tombs of Caere.

[illegible] antiques, publiées by Acad. des Inscr. Vol. I, p.783-21, Figs. [illegible]

[illegible]

[illegible]

The forms here present a sensible analogy to those that [illegible] [illegible] age of the succeeding age. Here is an alabaster with pyriform body (Fig. [illegible]). At the bottom is a slight projection pierced by a hole through which could be passed a cord. Not all [illegible] [illegible] and break [illegible] scattered in the fields between the [illegible].

precious finds.[1] In the heap of fragments taken from this well have been found all the types of pottery, that we have studied at Corinth and at Syracuse.[2]

Note 1.p.582. Histoire de l'Art. Vol. VIII, p. 517.

Note 2.p.582. L. Pallat. Ein Vasenfund aus Aegina (Athen. Mitt. 1897. p.2_5-333, Pls. VII-VIII, sect c.).

In Attica the vases called protocorinthian are rare. There has been found one at Aleusis beside vases of the Dipylon.[3] In the nuumerable fragments of pottery brought to light in uncovering the Acropolis of Athens, representing ceramics preceding the second Median war, there have been collected but a very small number of fragments to list in this category.[4] On the contrary, these fragments abound in Beotia and notably at Orchomene; lecythes, pyxis and skyphoi, all are there, but broken into small bits.[5] Here is a very well preserved pyxis that came from Tanagra (Fig. 295).[6] With geometric designs on the side and cover, the file of passing hinds and stags enclosed between the large rosette and a group of parallel lines, is an excellent specimen of the style that we seek to define.

Note 3.p.582. Ephemeris. 1889. p.177.Note 1.

Note 4.p.582. Gräf in Jahrbuch. 1893. Anzeiger. p. 17.

Note 5.p.582. De Ridder. Fouilles d'Orchomene (B.C.H.1895.p. 182-188).

Note 6.p.582. Vasen aus Tanagra und verwandtes (Jahrb. 1887. p.18-23; Pl. II).

Outside of Hellas, vases of this kind have been collected in Sicily, at Megara Hyblea,[1] and oin Etruscan cemeteries in Italy. The Louvre possesses many of them taken from the tombs of Caere.[2]

Note 1.p.583. P. Orsi and F.S.Cavallari. Megara Hyblea in Mon. Antichi, published by Acad. des Lincei. Vol. I, p.798-912, Figs. of interments, 12, 16, 21, 48, 105, 114, 127, 144, 154, 175, 177, 282, 303.

Note 2.p.583. Hall E, Nos. 1-333. Pottier. Vases antiques.Pl-39.

The forms there present a sensible analogy to those that most frequently originate under the fingers of the Corinthian potters of the succeeding age. Here is an alabaster with pyriform body (Fig. 296). As the handle is a slight projection pierced by a hole through which could be passed a cord. For all decoration are radiating stripes around the neck, horizontal bands and great dots scattered in the fields between the bands. Here

is another with flat handle and pointed base; the same stripes on the shoulder. Between the bands that extend around the body is a herringbone band (Fig. 297). A third alabaster has the a appearance of a flask; on its surface are four black zones and four reserved light zones (Fig. 298). There may be cited an a aryballa in the form of a human leg (Fig. 299). The leg is shod by a boot reaching the knee, which is indicated by the black painting wit incised ornaments ion the front at the location of the tongue and the lacings. There is felt the effort of merchants who endeavor to attract patrons by the oddity of the a appearance that they give to the vessels in which their wares are placed.

It is known by the evidence of the excavations as by that of history, what the active commerce of Corinth maintained in the 7 th and 6 th centuries with the principal cities of Etruria; but this commerce must date farther back.[1] If in 735 the sailors of Corinth were sufficiently familiar with the coasts of Sicily to conduct bands of immigrants there, why did they then hesitate longer to pass the strait of Messina and to ascend t the Italian coast to the mouths of the Tiber and the Arno? We should then incline to regard as products of Corinthian manufacture the so-called protocorinthian vases, that have been found at Caere and in other Etruscan cemeteries.

Note 1.p.584. In the so-called pit graves begin to appear in Etruria the protocorinthian vases; there are even found in small number Corinthian vases with oriental decoration. Now according to the entire observations based on the study of furniture, it would be in the 8 th century that men bagan to dig those pit graves, and the practice of that mode of burial would be continued during the entire 7 th century (J. Martha. L' art etrusque. p.100-104).

The misfortune that there have not been executed at Corinth excavations similar to those of the Heraeum of Argos, which permit one to go back by each century in the past of the city until even its birth. Those undertaken there by the American School in recent years do not have this character. The most ancient monuments whose traces have been found are those of t the Corinth of the Cypselides.[2] Thus there is nothing in the results of the excavations, that gives reason to think that Corinth took the initiative in this matter; but there is also

nothing that authorizes the historian to seek these origins e elsewhere, to designate other workshops as the inventors of t this style, as those that brought it in fashion, and which for a certain time had the monopoly of this manufactore. It is a different impression that brings us to Corinth, and that suggests the diversity of the sites where were collected vases of this sort, whether in the Hellenic peninsula or in the territory of the Greek colonies of Sicily and of Italy.

Note 2.p.584.See the numerous Articles treating of these excavations in Jour. Am. Inst. Archaeology. 1897-190..

The style in question, that of the so-called protocorinthian vases, would be that attained by spontaneous evolution in all the workshops of European Greece and of its western colonies, when after the long reign of purely geometric design, the artist felt heborn in himself the desire to reintroduce in the decoration of all his works, images borrowed from the world of life, and this task was facilitated for him by the models that came to him from the Orient. This is a transition style. With the slight resources at his disposal, he prepares and announces at once this style with violet and white retouches, which will soon blossom at Corinth, and that of those vases with black f figures, whilh will make the fortune of the potters of the Ceramicos of Athens.

It does not then appear that in this change of taste, there was claimed a right of priority for the ceramists of Corinth. We should rather believe in the general effects of the tendencies manifested, almost in the same hour in various places in the entire extent of western Greece. Does this mean that it is necessary to condemn as entireln arbitrary the use of the word protocorinthian? We do not thing so; it seems to us that this term was suggested to this inventor by the exact knowledge that he had of the monuments of this archaic industry. All vases g qualified as protocorinthian are of small dimensions. Most of them have forms that allow to be divined the uses in view of which these forms have been given to them. These are vases for perfumes.

The round boxes called pyxis contained unguents. They were the pomade pots of antiquity. If one desires to know what they formerly contained, it suffices to note the arrangement presented by many of them; the cover has a flange descending quite

were large enough to play the part of toilet accessories; the [illegible] (Fig. 300). The little jars could serve to sprinkle precious waters at fes- [illegible] the toilet and part of the guests. As for the alabastra and the aryballos, if we did not have the ancient texts that show their purpose,[1] this would be revealed to us by the detail [illegible]

[illegible] was placed on the skin; thus it prevented the liquid from spreading as a ribbon; it was reserved for the drops on the body [illegible] anointing was to be made. In the paintings that re- produce scenes of the gymnasium or bath, these vases are sus- suspended on the wall or on the branches of trees (Fig. 301). [illegible] the skyphos could be used for this service. They [illegible] have the form of vases for drinking. But in general they are very small to have been used for that purpose. One could [illegible] believed that they likewise belong to the list of vases for [illegible] perfumes. In the various [illegible] of the museums are [illegible] with the [illegible] covers them [illegible].[1] The explorers were struck by this fact; but they [illegible] to account for it. All is explained if one admits that these covers in great part belonged to vas- es, that are only the appendages of the box, and that like [illegible]

[illegible]

During several centuries, Egypt and Phoenicia had supplied the Greeks with scented pastes and oils that they had learned not to do without, from the age whose customs are reflected in the epic poetry. Egypt had always loved the perfumes, that its industrious artisans composed with essences supplied by the f[illegible] flora of the valley of the Nile; they likewise employed [illegible] and Egypt. [illegible] forms a collection of vases of glass [illegible], whose form is similar to those o[illegible] [illegible] co-rated as flacons for perfumes.[2] Nearly earlier ones have bee[n] found in all cemeteries, where are found Phoenician wares that [illegible]. Those of [illegible] supplied many. By [illegible] [illegible] in the [illegible] of the first cases in which

were large enough to play the partof toilet necessaries; there are seen in paintings several flasks placed in a row (Fig. 300). The little jars could serve to sprinkle odorous waters at feasts on the hands and hair of the guests. As for the alabasters and the aryballas, if we did not have the ancient texts that show their purpose,[1] this would be revealed to us by the detail of their form. Around their mouths extends a wide fl flat plate.

That was placed on the skin; thus it prevented the liquid from spreading at random; it was reserved for the parts on the body where this anointing was to be made. In the paintings that represent scenes of the gymnasium on bath, these vases are seen suspended on the wall or on the branches of trees (Fig. 301). Not merely the skyphoi could be used for this service. They indeed have the form of vases for drinking. But in general they are very small to have been used for that purpose. One could have drunk very small quantities. Here is what causes it to be believed that they likewise belong to the list of vases for p perfumes. In excavations of the Heraeum and mingled with the remains of pyxis and skyphoi, were found many more covers than boxes.[1] The explorers were struck by this fact; but they mentioned it without seeking to account for it. All is explained if one admits that these covers in great part belonged to vases, that had only the appearance of the box, and that like t the alabasters and lecythes contained fragrant oils.

Note 1.p.586. Waldstein. Argive Heraeum. II. p.136-139.

During several centuries, Egypt and Phoenicia had supplied the Greeks with scented pastes and oils that they had learned not to do without, from the age whose customs are reflected in the epic poetry. Egypt had always loved the perfumes, that its industrious artisans composed with essences supplied by the r rich flora of the valley of the Nile; they likewise employed various substances obtained from that Arabia from whence came incense and myrrh. Egyptian tombs furnish a profusion of vases of glazed clan or of glass, whose form is similar to those of alabasters, aryballas anf pyxis; quite at first were these recognized as flasks for perfumes.[2] Nearly similar ones have been found in all cemeteries, where are found Proenician wares near the dead. Those of Rhodes have supplied many. By dozens are t they counted in the British Museum en the glass cases in which

are described the objects found by Salzmann at Camiros. Most of these vases must be of Phoenician origin. Phoenicians had

not fail to open in their bazaars sites, where were the Egyptian articles, the most famous perfumes made at ... or in the cities of the Delta.

Note 2.p.386. Louvre. Egyptian museum. Civil hall. Histoire de l'art. Vol. I. p. 553. It is known from Pliny, that until the empire, Egypt and Phoenicia still produced perfumes sought

Note 1.p.387. Histoire de l'Art. Vol. III, p. 671-684, 722-

After a century or two, the shocks of destruction succeeding the Dorian invasion had ended, when the islands and coasts of Asian and European Greece were occupied by a settled population of constantly increasing density, Phoenician traders ... the competition and hostility of the growing navies of Miletus and Phocaea, Chalcis and Corinth. They preferred to go farther toward the shores of Africa and the West, places where they had more freedom in their actions. On the other hand the Greek sailors did not voluntarily risk going south beyond Cyprus ... waters that washed Syria and Egypt not many centuries interested

the Ionians again learned to follow the routes of their ancestors, the people of the sea, and formerly passed over it in all

... of the Nile. It does not appear that even then the ships of Chalcis and of Corinth spread their sails to the winds that drove them in that direction. They steered to other distant shores by preference, those of the North and West, the coasts of Thrace and of Propontis, Epirus, Italy and Sicily.

Note 2.p.391. Herodotus. IV. 151.

...ets of the markets of Peloponnesus and of central Greece, ...

and castles of luxury. On the other hand, the exercises of th...

are deposited the objects found by Salzmann at Camiros. Most of these vases must be of Phoenician origin. Phoenicians had early borrowed from Egypt the industries of glass and of faience with a colored glaze.[1] Tyrians and Sidonians doubtless did not fail to open in their bazaars shops, where were counterfeited Egyptian articles, the most famous perfumes made at Memphis or in the cities of the Delta.

Note 2.p.586. Louvre. Egyptian museum. Civil hall. Histoire de l'Art. Vol. I. p. 553. It is known from Pliny, that under the empire, Egypt and Phoenicia still produced perfumes sought in the entire Roman world (H.N.XIII, 2).

Note 1.p.587. Histoire de l'Art. Vol. III, p. 671-684, 732-750, Pls. V-IX; Figs. 484-532.

When after a century or two, the shocks of destruction succeeding the Dorian invasion had ended, when the islands and coasts of Asian and European Greece were occupied by a settled population of constantly increasing density, Phoenician merchants withdrew from this Egean sea where they everywhere met the competition and hostility of the growing navies of Ephesus, Miletus and Phocea, Chalcis and Corinth. They preferred to seek farther toward the shores of Africa and the West places where they had more freedom in their actions. On the other hand the Greek sailors did not voluntarily risk going south beyond Cyprus, Rhodes and Crete.[2] They would have feared to meet in the waters that washed Syria and Egypt too many enemies interested in closing their course. It was only in the 7 th century that by the intimate relations formed with the Saite princes, that the Ionians again learned to follow the routes of their ancestors, the people of the sea, had formerly passed over in all directions, and turned the prows of their vessels toward the mouths of the Nile. It does not appear that even then the ships of Chalcis and of Corinth spread their sails to the winds that drove them in that direction. They steered to other distant shores by preference, those of the North and West, the coasts of Thrace and of Bithynia, Epirus, Italy and Sicily.

Note 2.p.587. Herodotus. IV. 151.

When the Phoenicians had ceased to be the recognized furnishers of the markets of Peloponessus and of central Greece, in those cities with ever increasing wealth, developing tastes a and habits of luxury. On the other hand, the exercises of the

[illegible]
of Greek society. It is known that artisans were aroused, and that efforts were induced by the crowns distributed by the jury, [illegible]
which were those of Olympia. In these conditions, perfumes [illegible]
the toilets of both men and women, for festal halls and palestras, where they served to render flexible the members and to efface the traces of the bruises, dust and sweat. If [illegible] no longer received from abroad in full cargos of these oils and unguents, they had to make them in Greece itself. Then possessed or could cultivate there most of the plants whose essences or flowers were utilized in the laboratories of the bazaars of the Orient. They could also borrow from the flora of the adjacent countries. The plains of Thrace perhaps then had those vast fields of roses from which is now obtained the essence, whose penetrating fragrance is so appreciated in Greece and T[illegible]

[illegible]

From the time when the so-called Mycenaean civilization flourished, [illegible] ages and had commenced to make for vases at least a part of the perfumes that they consumed. To store and transport this sort of liquids, their potters made vases that scarcely found use except in that industry. We mean those vases of very peculiar type, known under the name of false amphoras or stirrup amphoras.[2] This is what was supposed from the form itself of those strange vessels; but by a lucky chance, men are assured that this conjecture was well founded. One of those vases [illegible] intact to the Museum of Berlin, its single orifice was still hermetically sealed. This was opened and at once the very o[illegible]
[illegible][3]

[illegible] 467, 198.

[illegible]

The false amphora associated with the Mycenaean civilization. This form had its advantages but also its inconveniences. The narrow lateral mouth was easily closed by a ball of clay and [illegible] to pour the precious liquid in drops; but this must be

gymnasium occupied an increasingly greater place in the life of Greek society. It is known what ambitions were aroused, and what efforts were incited by the crowns distributed by the judges of those pannellenic competitions, the most celebrated if which were those of Olympia. In these conditions, perfumes of all kinds were in increasing demand. They were necessary for the toilets of both men and women, for festal halls and palestras, where they served to render flexible the members and to efface the traces of the bruises, dust and sweat. If there were no longer received from abroad in full cargos of those oils a and unguents, they had to make them in Greece itself. Then possessed or could acclimate there most of the plants whose leaves or flowers were utilized in the laboratories of the bazaars of the Orient. They could also borrow from the flora of the adjacent countries. The plains of Thrace perhaps then had those vast fields of roses from which is now obtained the essence, whose penetrating fragrance is so appreciated in Greece and T Turkey.[1]

Note 1.p.588.Oil perfumed by roses is already mentioned by Homer (Iliad. XXIII. 186).

From the time when the so-called Mycenaean civilization flourished, the tribes established on the western shores of the Egean sea had commenced to make for vases at least a part of the perfumes that they consumed. To store and transport this sort of liquids, their potters made vases that scarcely found use except in that industry. We mean those vases of wery peculiar type, known under the name of false amphoras or stirrup amphoras.[2] This is what was supposed from the form itself of those strange vessels; but by a happy chance, men are assured that this conjecture was well founded. One of those vases came intact to the museum of Berlin, its single orifice was still hermetically sealed. This was opened and at once the very characteristic odor was diffused in the entire room.[3]

Note 2.p.588. Histoire de l'Art. Vol. VI, pp915-916; Figs. 467, 493.

Note 3.p.588. Furtwängler. In Jahrb. 1891. Anz.p.156

The false amphora disappeared with the Mycenaean civilization. This form had its advantages but also its inconveniences, The narrow lateral mouth was easily closed by a ball of clay and tended to pour the precious liquid in drops; but this must be

a very slow operation and collects only to introduce it [illegible]
the [illegible]. Then, [illegible] tendency of [illegible] and [illegible] in [illegible]
new bronze, and preferred to adopt other types, even those t[illegible]
[illegible] and Phoenicia employed for that purpose. They were more
convenient to handle, both for the dealer that had to fill t[illegible]
vases and the person who used them. By the examples of those
which we have given, one can judge of the variety that the in-
genious kind of the Greek potters knew how to put in the forms
of these vases.

We believe that Corinth took the chief part in devel-
oping and distributing these types. Corinth had doubled the va-
riety and choice of the forms of decoration applied by the
[illegible] it
is true that one cannot avail himself of proofs like those wh-
ich books of her superiority, that the artists of Corinth [illegible]
acquired in both the industry of clay and that of bronze. We
learn only from Pliny that the perfume of the iris made by Cor-
inth was long sought by all;[1] but the monuments can here supp-
lement the silence of the texts. By hundreds are they arranged
in the glass cases of the museums, vases certainly of Cori-
nthian origin, found either in the tombs of Greece or especially
in those of Etruria. In most of these vases are they recogniz-
[illegible]
some like them came from other workshops, such as those of I-
onia, [illegible] and [illegible], one is very far from meeting in the
[illegible] which appear to have had the same pur-
pose. [illegible] and is there not re-
ason to deduce from it that Corinth practised with a success
attested to us by the distribution of these forms, the industr-
y which then she [illegible] other city of Greece [illegible] the same
[illegible]

[illegible] . . . .

[illegible] . . . .

That a [illegible] like this industry could be able to [illegible]
ries on all the shores of the Mediterranean the flasks [illegible] two
to contain its products, is [illegible]
[illegible]
[illegible]
same forms by those of the succeeding age; but the decora-
is much simpler, and they do not again present the incised

a very slow operation and delicate only to introduce it into the amphora. When this industry of perfuces was revived in the new Greece, men preferred to adopt other types, even those that Egypt and Phoenicia employed for that purpose. They were more convenient to handle, both for the dealer that had to fill the vases and the patron who used them. By the examples of these which we have given, one can judge of the variety that the ingenious mind of the Greek potters knew how to put in the forms of these vases.

We believe that Corinth then took the chied part in determining and distributing these types. Corinth had decided the entirety and choice of the forms of decoration applied by the brush of the master ceracist. To justify this conjecture, it is true that one cannot avail himself of proofs like those which boast of the superiority, that the artisans of Corinth had acquired in both the endustry of clay and that of bronze. We learn only from Pliny that the perfume of the iris made by Corinth was long sought by all;[1] but the monuments can here supplement the silence of the texts. By hundreds are they grouped in the glass cases of the museums, vases certainly of Corinthiau origin, found either in the tombs of Rhodes or especially in those of Etruria. In most of these vases are they recognized by their shape as perfuce vases.[2] Among the vases of the s same time that came from other workshops, such as those of Ionia, Beotia and Attica, one is very far from meeting in the sace quantity with vases that appear to have had the same purpose. Is not this difference significant, and is there not reason to deduce froc it that Corinth practised with a success attested to us by the distribution of these vases, the industry which then had in no other city of Greece either the same activity or the same importance?

Note 1.p.589. Pliny. H.N. XIII, 2 (Latin).

Note 2.p.589. E. Pottier. Vases antiques. Pls. 14-16, 40-43.

That about this time this industry should be able to scatter thus on all the shores of the Mediterannean the flasks known to contain its products, it was necessarn that behind it should be a very long past. We shall reach this past if we ascend to it with the vases termed protocorthian. These vases have the same forms as those of the succeeding age; but the decoration is much simpler, and they do not again present the incised lines

nor polychromy. Then what was represented by the very beginnings of a special ceramics, produced by the requirements of a prosperous industry; they would be the oldest works of shops in which the wheel and kiln of the potters would be placed at the orders of the Jean Maria Farina of ancient Greece.

The industry of perfumes is one of those in which is most necessary a knowledge of recipes often very complex, one of those in which skill of the hand plays the greatest part. Various indications give reason to think that the Corinthians owed to special circumstances the great advantage of collecting in place the secrets of the trade, their artisans possessing them by hereditary tradition. Whether Corinth was a Phoenician colony at the origin is affirmed by no text, and the Greeks seem to have retained no memory of this; but even the name of the city seems to have come from the Phonincian Qarth or Quiriath, a fortress. There was in the territory of Corinth a height known under the name of Mt. Phoenician.[1]

Note 1.p.590.According to Ephores in his XI th Book, in Stepren of Byzantium. Otherwise it is not known where was situated in Corinth this Phoenician mountain, and it has even been asked whether it is not proper to understand by this the hill crowned by a firest of palms.

Several Phoenician cults were sufficiently planted in these places to have persisted till the last days of paganism. There was on Acrocorinth the cult of the sun (Baal Samin), on the isthmus that of Melicerte (Melk-Qarth), and in the city itself as on the Acropolis that of Aphrodite (Ashtoreth), with the entirely oriental rite of sacred prostitution. At Corinth was adopted the Phoenician Athena.[2]

Note 2.p.590. Tzetzes at Lycophronem, verse 658. On these traces which the Phoenicians left at Corinth in the cults and myths, see Willisch. Die Sagen von Korinth in ihrer geschichltlichen Bedeutung. (Fleckeisens Jahrbuch. p.721-746u. This is further very lengthy and very confused.

It is then probable that perhaps when the Achaian kings reigned at Mycenae and Tiryns, there was a Phoenician agency, where Syrian workmen had just established themselves within reach of their patrons,and taking into account their tastes, to make articles for which they were certain to find a place among the coastal inhabitants of the two great gulfs on which Corinth

looked. When the invaders occupied the Peloponessus, it was all profit for them to find in a centre like Corinth, an industrious people that by its skill in technics could supplement the insufficient equipment brought with them; they had every interest to treat kindly these artisans and merchants, who worked for their benefit. Treated favorably, most of them must prefer to remain in this country in which they gained a liberal living, than to exile themselves to regain their distant country. Thus they remained in their workshops and agencies. They learned t the language of the conquerors that married the beautiful Syrian girls with great black eyes, and at length were lost in their ranks; but it was not without that this foreign element had exerted a profound influence on the aptitudes characterizing Corinthian people, this hybrid people that contributed to train many immigrants coming from all parts of the Greek world to seek fortune in this crossing of land and sea routes, under protection of the impregnable citadel. The first inhabitants of this privileged site, the men of Semitic race initiated the newcomers in the practice of those oriental religions, which owed their prestige to their origin and high antiquity. Trained to the exercise of all manual arts, they easily found in this multitude apprentices who soon rivaled the skill of their masters. Into all their fellow citizens anf even the chiefs t that governed them, they infused the taste for labor and commerce. The original character of the customs of Corinth and its historical role is explained only by this hypothesis of a strong afflux of foreign blood. Corinth was Dorian only by dialect and name; it was not really a Greek city, whose life and entire appearance did not present in the least degree the traits by which is usually defined what it is agreed to call Dorian genius.

Even before the Dorians came, the makers of perfumes of the Phoenician agency had perhaps already acquired the habit of s substituting vases of clay for those of glass or of glazed faience, to contain their products; these were employed in Greece for all uses of domestic life. In every way in the Hellenized Corinth, which is the only one that we can reach, clay was the sole material used by these workers for this purpose; but they understood that the better their wares were presented, the better would they sell. They desired the flasks containing them should have a good appearance; thus they gave them a decoration

with motives borrowed from that reigning in all western Greece.

The success of this business was rapid and brilliant; this is evidenced by those vases found in such numbers in Rhodian cemeteries as well as in those of Sicily and Etruria; but this success even produced competition. In Argolis, Egina, Attica and Beotia, men must equip themselves not to allow Corinth the monopoly of an industry corresponding to needs felt everywhere, and could count on fine profits. In more than one city, men attempted to make the pastes and fragrant oils that were placed in vases, which reproduced the forms and ornamentation of those that the merchants of Corinth had made the fashion. Antiquity never had laws against counterfeiting.

We have said how were represented the effects of one of those phenomena produced in the economic life of Greek society, when about the 9 th and 8 th centuries it was established and constituted within the lines in which operated its historical development. We should know nothing of this industry of perfuces, that has appeared as one of the industries which have contributed most to the marvellous flight taken by the fortune of Corinth under the Bacchiades, unless by the thousands of clay fragments we were not permitted to divine from them the importance. These fragments of broken vases seem to us sufficient to render very probable the hypothesis that we have stated. If it be desired to accept it, there will be found justified in a c certain measure, the term that has caused the objections, apparently well founded.[1] Protocorinthian may be termed of those vases, even those in which is not a particle of Corinthian clay, in the sense that then repeat or recall more or less nearly t the types, introduced by the earliest potters of Corinth and brought into fashion by its commerce.

Note 1.p.592. For these objections, see Couve. Un lecythe du musee du Louvre.(Rev. arch. 1898.[1] p.223-230) and De Ridder. (B.C.H. 189.. p. 182. Note 1.

There remains only one more question to discuss; what date is it proper to assign to the vases of this sort, made at Corinth itself or overseas by Corinthian workmen, were copied or imitated in other centres of production?

Planted and acclimated at Corinth by Phoenician colonists, the endustry of perfumes must be one of the first that furnish-

furnished freight for all that commercial fleet, that was so quickly emboldened for long voyages. This industry had perhaps commenced from the beginning of the 8 th century to kindle the ovens, which burned for it the vases filled with its products, and by the finds in the cemetery of Syracuse we know, that about the end of the century these vases belonged to the list of vases termed protocorinthian. On the other hand, in the tombs that the most careful explorers of Etruscan cemeteries believe can be attributed to the last years of the 7 th and the first years of the 6 th centuries, one scarcely finds vases with incisions and white or violet retouches, those called recent Corinthian vases.[1]

Note 1.p.593. Gsell. Fouilles dans la necropole de Vulci. 1890. p. 480-494, 526-527; Pl. II.

Then it would be in the first half of the 7 th century that the potters of Corinth felt a desire to vary and renew the style of their decoration, that they gave to it characteistics by which was defined the ceramics properly Corinthian, which very clearly marked traits permitted one to distinguish at first sight from the ceramics of Ionia and of Attica.

3. Corinthian Pottery with Plant and Zoomorphic Decoration.

At Corinth as elsewhere in all Greece, the hour came when artisans and their patrons began to be tired of the monotonous repetitions of the purely linear style; but this was not on a certain day, that in the workshops the ancient abstract and cold style of the Dorian age gave place to the new style, that had the ambition to restore the living form to its rights.[2] One would find more than one vase to cite here that represents this transition, this passage from one style to another. Notably in this category are placed those having for entire decoration several rows of imbricated scales (Fig. 302). These scales are those that cover the body of the fish and that of the serpent.

Note 2.p.593. To fix the time when ceased the manufacture of protocorinthian vases, it has been desired to seek the indication in the fact that scarcely any trace of them has been found among the fragments which strew the soil of Naucratis and of Daphnae in Egypt.(Fl.Petrie. Naucratis. Part I, p.5, 48-49; II p. 43, 50, Tanis. Part II, p. 61-71); but this statement does

not seem to me to justify the conclusions derived from it. These Ionian colonies, founded in the 7 th century, had a flourishing life during the entire course of the 6 th century; there are found in but small number the fragments of those Corinthian vases with violet retouches, and about the same time were imported into Rhodes anf Etruria. What proves this absence or rarity of the products of Corinthian manufacture, is that there was little or no commerce between Corinth anf the Greek cities of the Delta; they obtained from the bazaars of lower Egypt t the perfumes which they purchased. H. Printz (Kunde, p. 69-70) however mentions the existence at Naucratis of some fragments of a pottery closely resembling the protocorinthian vases. Those are especially the remains of skyphoi without lip and with horizontal handles.

In the adoption of this motive is the memory of nature, the recall of two principal types of the animal realm; but the contour of these scales was treated by the compasses; this is then again geometric decoration. Yet the advance is sensible. For the execution of his decoration, the artisan here disposed of a resource which he had lacked before. He resolutely uses the process of incision as well as that of white and red.

The use of the incision dates far back, even to the prehistoric age. We have given some specimens of the very rude pottery, whose fragments were gathered at Hissarlik in the Troad, on t the rock itself among the ruins of ancient habitations.[1] The workman that fashioned it with the hand did not desire it to be deprived of all ornament. With a sharpened point of a bone or of a stick, he undertook to incise in the damp clay some r rudimentary designs, parallel lines, circles enclosing a point, vertical and horizontal lines traced by a hesitating finger. Since then men never ceased to resort to that expedient for giving a semblance op ornament to the rustic and monochrome pottery, that for many centuries after the invention of the wheel, they continued to make for the household and the kitchen; but since they had learned to place the colors on the clay, for all pottery with more or less the character of an object of luxury, the brush alone traced the contours and also indicated the details of the ornament or figures, the novelty for which the honor is given to Corinthian potters was to call the point to the aid of the brush, to accent with decision in the

interiors of the silhouettes the attachments of the motive, t the folds and play of the drapery, the projection of the mus-cles that move the members.

Note 1.p.594, Histoire de l'Art. Vol. VI, Figs. 444, 445.

In the part taken there by the ceramists of Corinth, what is to be seen is not the imitation of ordinary procedures in the fabrication of a very common pottery destined for the most ordinary uses of domestic life, that could come from the same potteries as the painted vases; it is rather a borrowing made from the trade of the workman who wrought and chased metal. By the evindence of the ancient authors as by that of the monuments is known what an important part this trade played in the movement of Corinthian industry. All antiquity praised the bronze of Corinth and the qualities produced by the wise proportions of the different materials composing it. Now when this refers either to the statues cast in the ground or a relief executed in repousse, whatever little care that the artist devotes to his work, he never fails to retouch it with the graver. The bite of the tool gives it the refinement that could be given neither by the mould nor the hammer.-

Note 1.p.595. We shall have occasion to return to the Corinthian history nf metal and to cite the texts.

With some hesitation at first the ceramist appropriated this method of design. On the most ancient vases on which the point intervened, it was only to accent the lines of the motives of ornament. The point was emboldened only by degrees to lend its aid to the brush. On certain vases, incised lines appear in t the purely ornamental part of the deforation, while there is no trace of it in the figures, that occupy the place of honor on the body or around the neck (Fig. 303).

The potter had no reason to adhere to this mean term. The p procedure offered him too many advantages, that he did not very quickly come to make its use more general. It required more reflection and calculation to reserve blanks in the image while the brush ran over the field, than to incise with the graver the color already fixed by the fire. More expeditious, the graver gave equal precision. Appearing where the tool scratched, the painting, the natural tone of the clay frankly outlined the form. After having made in the trace of the ornament a trial of the new method, the artist then hastened to apply it to the

figures, at first in the files of marching animals comprising by themselves alone the decoration on an entire series of pieces (Fig. 304), then in all those scenes either borrowed from real life (Fig. 305), or from the myths made popular by the epic poetry, that the Corinthian painter has represented on vases of great dimensions.

Another change occurs when they cease to make the vases which we have called protocorinthian. In those succeedind them, it is no oyly by complicating and varying the motives, that they labor to increase the decoration. Also for this purpose are used the resources of color. On the black which fills the entire field of the image, whether an ornament or a figure, a are laid touches of violet and sometimes of white (Pl. XXII); also the white is sometimes laid directly on the clay. Thus is obtained a polychromy that does not lack richness of effect; Yet it has not the gayety of that of the most careful Rhodian vases. In the tones of the grounds are distinguished two varieties, red and orange yellow. The yellow ground dominates on p plates, boxes, alabasters, aryballas, oenochoes, cups and slender amphoras. This is found on the most ancient products of t this manufacture; but then both technics are employed at the same time in the workshop. Red is doubtless obtained by the mixture of coloring matter with clay, which the painter uses by preference for those vases on which he places complex paintings, for great hydrias and amphoras with great bodies. Yet all the same, the tint of the bare clay is far from availing as the ground of the painting, and is covered by the beautiful creamy tint, which Ionian potters extended on their clay; it does not give such a happy harmony.

The favor enjoyed at Corinth by the process of incision among ceramists has seemed to us to be explained by examples given by those skilful artisans, who worked in metal in the same city. In this taste for polychromy that Corinthian ceramics manifests more and more as it develops its technics, we incline to see the effect of the prestige and of the suggestions of another industry of luxury, which then made the fortune of that enterprising and industrious city, an industry that like that of perfumes dated back in its origin to the Phoenician agency, of which Greek Corinth was the heir and continuer. We mean the industry of the weaver and embroiderer.

The poet Antiphanes, cited by Atheneus, recalls that each c city had its psecialty, as we should say. He says that "men demand their cooks from Elis, caldrons from Argos, wine from Phliunthe, its tapestries from Corinth, fish from Sicyon, flute-players from Aegion, cheese from Sicily, perfumes from Athens and eels from the Beotians."[1] This brief mention does not inform us concerning the mode of execution of the pieces whose vogue it attasts. Stroma is anw tissue that by its dimensions, softness and richness of its decoration, is suited to serve as a portiere, cover ground, walls or beds. They also praised the light linen fabrics made in the workshops of Corinth and exported even into Ionia. There these were made long tunics with m multiple and fine folds, that "we see on statues and vases, enclosing the bodies and members of women. There were tints of purple, others of violet and yet others of blue; some had the color of fire or that of the sea. They were called calasiris,[1] a name borrowed from Egypt. Elsewhere the courtesan Glycera receives a gift from her lover, "Corinthian blouse, entirely new and with sleeves descending to the elbow." [2]

Note 1.p.597. Atheneus. I. 27 D.

Note 1.p.598. Democritus in Atheneus. XII, p. 582.

Note 2.p.598. Machon in Atheneus. XIII, p. 582.

We have already had occasion to recall that the Homeric epic admired and praised the women of Sidon and Tyre. There is often mention of those Syrian slaves, much appreciated by their masters, who knew "beautiful works."[3] In those works must have b been employed the women of the Phoenician colonists of Corinth, like the foreign servants of Hecuba, Helen and Penelope. While their husbands labored and sold in the bazaar, they at home arranged a warp for a high filling and threw the shuttle or embroidered with colored threads on fabrics of linen or wool. They must also have had pupils there. These were well initiated in all the refinements of the shuttle and needle, as in the recipes of the dyer, who prepares the threads used by the weavers and embroiderers. The motives that grew under the nimble fingers of the Phoenician workwomen were rosettes, palmatiums, and lotus flowers; "the fanciful animals of all sorts that the barbarians embroidered on the fabrics;"[4] there were figures of the gods and demons of the local religion. The tradition of t the designs by which were decorated the rugs and state vestments

were transmitted by practice from mother to daughter; then wer-
[illegible]
instructed in this school, Greek workwomen must comply in e-
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the mistresses from whom they had received lessons. The style
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them from the valley of the Danube by the Dorian tribes. In
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lines and points. This style had nothing that could be compar-
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the mind of the spectator, to the types of the repertory crea-
ted by the Phoenician ornamentists, the neat and ingenious dis-
ciple of the artists of Egypt and Chaldea.

[illegible]

From the beginning the works of this kind executed in the Hellenized Corinth of the Bacchiades, like looms must be impressed by a very marked trace of exoticism. Men thus found themselves better prepared there than elsewhere in Europe to suffer the influence of the arts of the Orient. To respond to the desire of renewal and extension of taste manifested about the 8 th century in the entire extent of the Greek world, there [illegible] cities, for example at Sparta or Athens. There was in that Venice of antiquity governed by an aristocracy of merchants, a display of magnificence then found nowhere else to the same degree in European Greece. Besides, it was not alone their native industry, that was demanded the splendid equipment of all this luxury. To satisfy the tastes and needs born from the progress [illegible] in the ports of Asia and imported into Corinth the rugs of Babylonia and the marvels created by the needles of Chaldean women embroiderers.

By all that comes to us today from the Orient, by the silks of China and Japan, by the shawls, muslins and painted linens of India and Persia, by the embroidered fabrics and the rugs of Khorassan and of Asian Turkey, we can form an idea of what [illegible]

were transmitted by practice from mother to daughter; then were also preserved by the patrons belonging to certain workshops. Instructed in this school, Greek workwomen must comply in repproducing the designs that they had been taught to trace by t the mistresses from whom they had received lessons. The style they prevailing in all European Greece was that brought with them from the valley of the Danube by the Dorian tribes. In spite of the trouble taken to diversify its combinations of lines and points, this style had nothing that could be compared for the variety of the forms and for the images aroused in the mind of the spectator, to the types of the repertory created by the Phoenician ornamentist, the heir and ingenious disciple of the artists of Egypt and Chaldea.

Note 3.p.598. Odyssey. XV, 417; Iliad. VI, 289. Histoire de l'Art. Vol. III, p. 876-878.

Note 4.p.598. Philostratos. Images. II, 31.

From the beginning the works of this kind executed in the Hellenized Corinth of the Bacchiades, like Ionia must be impressed by a very marked tinge of exoticism. Men thus found themselves better prepared there than elsewhere in Europe to suffer the influence of the arts of the Orient. To respond to the desire of renewal and extension of taste manifested about the 8 th century in the entire extent of the Greek world, there was less effort to be made by the Corinthians than in other c cities, for example at Sparta or Athens. There was in that Venice of antiquity governed by an aristocracy of merchants, a display of magnificence then found nowhere else to the same degree in European Greece. Besides, it was not alone their native industry, that was demanded the splendid equipment of all this luxury. To satisfy the tastes and needs born from the progress of wealth, facilities due to maritime commerce, they purchased in the ports of Asia and imported into Corinth the rugs of Babylonia and the marvels created by the needles of Chaldean women embroiderers.

By all that comes to us today from the Orient, By the silks of China and Japan, by the shawls, muslins and painted linens of India and Persia, by the embroidered fabrics and the rugs of Khorasan and of Asian Turkey, we can form an idea of what were the splendor and variety of tones in the fabrics everywhere presented to the eyes of the Corinthian potter. These

were tapestries hung on the walls in houses of the nobles, the woolen mantles on which the ornament retained the capricious elegance in its crowded richness, the veils of linen on which conventionalized flowers and fruits rose in vivid and warm t tints from the whiteness of the ground. Were objects better suited to arouse to emulation the ceramist painter, to incite him to cover his clay with decoration into which something had passed of the beauties that were adimared in those draperies? Thus he found himself led to lavish in his decoration those t touches of violet that recalled the vats of purple in which t the dyer steeped his fabrics, and that he took pleasure in tempering the severity of his reds and blacks by the clearness of his whites.

Further, these were not all counsels given to the ceramist painter by those masterpieces of textile industries. They furnished him with other elements, that had no lesser part in the formation of his style. Particularly from them, he derived the motives by which were again introduced into his repertory types, that had long been banished from it, those characterized by the two great realms of the organic world. If the artist was then very sincere in the desire that he experienced to return to nature, he did not yet know how to inspire himself directln by it, to offer a personal interpretation of it. The plant and animal reappeared on his vases, but they only showed themselves conventionalized, to use a word now very much in vogue, i.e., presented in arrangements that midified the true form, sometimes abridging and summarizing it, sometimes overloading it by adding traits not in the original. From the plant is sometimes detached the leaf, sometimes the flower or the fruit. As for species of animals, if some are represented naturally, they a are immovable in the unique attitude, that by itself places t them outside life. This is not all; these bodies of men, quadrupeds and birds, the artist decomposes and recomposes according to his caprice. Thus he multiplies hybrid beings, where he unites in the imaginary whole, forms which coexist nowhere in the real world.

The Corinthian ceramist is not otherwise the inventor of the conventional arrangements and factitious types, which supply him with the materials of his decoration. One cannot hesitate as to the source of the motives that we shall meet here.

Until the time when the artist has reached the end of his apprenticeship, and finally takes his mode of seeing in the [illegible] he employs will all bear more or less clearly marked, the imp- [illegible] one will recognize there, those passed under the eyes of the Greeks in this age of commercial expansion by the objects [illegible] -tions of Africa and of Asia. On certain Ionian pottery, such as the cups and round plates, the arrangement of the ornament seems to us imitated from that of the ornamented metal cups that the Phoenicians excelled in making, while we rather seek in the tapestries the principle of the decoration of the Cor[illegible]. It is especially by these tapestries, rugs woven by the [illegible] or fabrics embroidered with the needle, that they seem to have inspired the Corinthian ceramist during the entire primary period of his efforts. There he took the taste and the feeling for color; there also he derived the elements represented in his [illegible].

This feeling for color explained by the imitation of many-[illegible] fabrics, we see already expressed on the vases decorated [illegible] (Fig. [illegible]). [illegible] [illegible] [illegible] [illegible] of more or less literal transcriptions on other vases that date at nearly the same time, but where the plant has supplied nearly all the theme of ornamentation. Such are those of the [illegible] and the [illegible] in which around the body extend [illegible] [illegible] the same motive.[1] Here the forms are heavy and restricted (Fig. 506); the copyist tries, but his hand is timid and awkward. He has succeeded better in tracing those little [illegible], one of which suffices to fit the swelled body of the aryballis (Fig. [illegible]) [illegible] [illegible] was found at Rhodes (Fig. 509). The entire body is occupied by an [illegible] floral motive, composed of the rosette with black and red petals, surrounded by a broad black circle from which rest

Until the time when the artist has reached the end of his a apprenticeship, and finally takes the mode of seeking in the national myths the themes of his paintings, the motives that he employs will all bear more or less clearly marked, the impression of what is termed the oriental style. At first sight, one will recognize there, those passed under the eyes of the Greeks in this age of commercial expansion by the objects of luxury supplied to them by the industries of the old civilizations of Africa and of Asia. On certain Ionian pottery, such as the cups and round plates, the arrangement of the ornament seems to us imitated from that of the ornamented metal cups t that the Phoenicians excelled in making, while we rather seek in the tapestries the principle of the decoration of the Oenochoes. It is especially by these tapestries, rugs woven by the trade or fabrics embroidered with the needle, that seem to have inspired the Corinthian ceramist during the entire primary period of his efforts. There he took the taste and the feeling for color; there also he derived the elements represented in his decoration.

This feeling for color explained py the imitation of manycolored fabrics, we see already manifested on the vases decorated by incised scales (Fig. 302). These are there detached in violet ou a white network. There are violet, black and white on the neck of another aryballa as in the stripes that radiate around the foot (Fig. 303). There is again divined the habits of more or less literal transcriptions on other vases that must date at nearly the same time, but where the plant has supplied nearly all the means of ornamentation. Such are those of the alabasters and the aryballas on which around the body extend garlands of lotus flowers or buds. They have not the elegance and freedom that we have mentioned in Ionia, in the placing of the same motive.[1] Here the forms are heavy and restricted (Fig. 306); the copyist tries, but his hand is timid and awkward. He has succeeded better in tracing those large palmatiums, one of which suffices to fit the swelled body of the aryballa (Fig. 307) or the interior of a plate (Fig. 308). As mucr can be said of the great alabaster with pyriform body, that like the plate was found at Rhodes (Fig. 309). The entire body is occupied by an ample floral motive, composed of the rosette with black and red petals, surrounded by a broad black circle from which radiate

four enormous expanded red lotus flowers. The dotted white line on the outlines of the petals enhances the effect of the
[illegible]
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ian workshops to resort to the motives of the ancient repert-
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these archaizing vases from those preceding them was the inf-
riority of the execution. For example, there is the vase deco-
[illegible]
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the great floral motive developed beneath each handle of the
hydria, on which is represented the departure of Hector (Fig-
[illegible]
lotus buds. Above are two volutes of the same color (fig. 310)
The whole has a true elegance.

Note 1.p.801. Histoire de l'Art. Vol. IX, p. 481-482).

Beside these garlands and palmettes, the painter scatters in profusion on vases on which plant decoration dominates, ros-
[illegible]
al, the central part is red. Around it radiate black petals, sometimes dotted with white at their ends. There is also seen appear, either in the field and in the borders the chessboard, triangles and lozenges, the zigzag and fringes.[1] It has been desired to see there a memory of Mycenaean ornamentation. When
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metal cups [2] or on those Assyrian tapestries known to us by the alabaster reliefs.[3] On these fabrics as well as on the c...
of bronze or silver are everywhere rosettes as if scattered f
from full hands. Then it is unnecessary to seek elsewhere than in the creations of oriental industry the source of all the -
ments of the style in question, of its principal motives and
[illegible]

[illegible]

Note 2.p.803. Histoire de l'Art. Vol. III, Figs.547,542,552.

[illegible]

The motive of the hunt of the hare, so often represented ...

four enormous expanded red lotus flowers. The dotted white line laid on the outlines of the petals enhances the effect of the color. We cannot further admit that these two last vases are contemporaneous with those in which we have seen the first attempts of this style. Even when the painter was accustomed to lavish the figure everywhere, one must not forbid the Corinthian workshops to resort to the motives of the ancient repertory for the decoration of many pieces; but what distinguishes these archaizing vases from those precedinm them was the superiority of the execution. For example, there is the wise harmony of the tones and the very firm work of incision. Nowhere has the ornamentist been better inspired than in the trace of the great floral motive developed beneath each handle of the hydria, on which is represented the daparture of Hector (Louvre. Hall E, 642). This is a white palmatium between two white lotus buds. Above are two volutes of the same color (Fig. 3-0). The whole has a true elegance.

Note 1.p.601. Histoire de l'Art. Vol. IX, p. 461-462).

Beside these garlands and palmatiums, the painter scatters in profusion on vases on which plant decoration dominates, rosettes of a design more or less complicated. On the most careful, the central part is red. Around it radiate black petals, sometimes dotted with white at their ends. There is also seen appear, either in the field and in the borders the chessboard, triangles and losenges, the fylfot and fringe.[1] It has been d desired to see there a memory of Mycenaean ornamentation. Without denying the possibility of that transmission, we observe that these motiveu are nearly all found either on Phoenician metal cups [2] or on those Assyrian tapestries known to us by the alabaster reliefs.[3] On these fabrics as well as on the cups of bronze or silver are everywhere rosettes as if scattered f from full hands. Then it is unnecessary to sekk elsewhere than in the creations of oriental industry the source of all the elements of the style in question, of its principal motives and their sporadic complements.

Note 1.p.603. Pottier. Catalogue. p.431.

Note 2.p.603. Histoire de l'Art. Vol. III, Figs.547,548,552.

Note 3.p.603. The same. Vol. II, Figs. 443-448.

The motive of the hunt of the hare, so often represented on

the archaic vases from varioas workshops, as according to Hesiod it was on the shield of Hercules,[4] perhaps itself at this origin. On the bronze cup found at Nimroud and decorated by c concentric circles, one of these circles is filled by dogs racing.[5] In the border of another of these basins, hares and dogs alternate.[6] What caused the choice of this motive by the oriental ornamentist, what explains the alacrity with which the Greek ornamentist adopted it and the persistence shown in repeating it for more than a century, is the form presented by the bodies of the hare and dog, stretched out in length for the race.[7] In this respect these animals are better suited than the stag or deer higher on their legs and crowned by slender bushes, for filling the field of one of those very low bands that the ceramists love to place either on the shoulder or near the foot of their vases (Fig. 303).

Note 4.p.603. Hesiod. Shield, verses 302to 304.

Note 5.p.603. Layard. Second series of monuments of Nineveh. Pl. 61.

Note 6.p.603. The same. Pl. 64.

Note 7.p.603. On the hunt of the hare, its origins and the different forms that it has takin in the ornamentation od Greek vases, see Löschke. Dreifussvase aus Tanagra.(Arch.Zeita 1881. p. 30-52, Pls 3, 4, 5).

From the time when the artist again began to be interested in the world of life, he could not long restrict himself to r represent only the plant. Alreadn significant symptoms are this frequent appearance of the dog and hare in the fields of these vases, where the different parts of the plant have furnished the material for all the rest of the decoration. The figure of the animal then does not delay to be inserted in those motives derived from the leaf and the flower. He gradually reduces them to the role of accessories. Like them being modeled by the lines traced by the point of the graver, he occupies the better part of the field. This is the triumph of what could be termed zoomorphic decoration. The painter then causes to march on the bodies of vases every sort of real animals.(Birds, fishes, ibexes, stags, bulls, rams, wild boars, lions and lionesses, or chimerical animals, sphynxes, griffins, sirens, etc.).

On certain vases, alabasters or aryballas of small dimensions,

On certain vases, alabasters or aryballas of small dimensioms, the entire disposable surface is occupied by a theme of this kind. Here is an aryballa on which are represented two dolphins facing each other and lowering their heads (Fig. 311). Here is an alabaster on which is seen the swan at rest between two rearing lions with tails symmetrically interlaced on the reverse. (Fig. 312). Elsewhere is a sort of cup of the type sometimes termed cothon. On the shoulder and between the three handles are pairs of sways facing each other (Fig. 313). The form of decoration is elegant. The arrangement is more original on a plate, where the entire field is filled by the figure of a lion. Resting on the border by his rear as if in a cage, his forepaws are placed on the same border. His elevated tail aids in filling the free space. Under the belly of the wild beast is a great lotus flower (Fig. 314).[1]

Note 1.p.605. Benndorf (griechische und Sikilische Vasenbilder, p. 25 and Pl. VI) attests the Corinthian origin. Two holes pierced near the top of the plate seem to indicate that it had a votive purpose.

There is sometimes found combined with this decoration inspired by oriental tapestries, a motive that seems to have a different origin. This is furnished by cephalopod mollusks, which the Mycenean artist pleased himself by representing.[1] The curves described by the long and flexible tentacles of these marine animals seemed to the Corinthian potters adapted to fill the fields of their pottery. The octopus is seen on an araybal-la discovered at Rhodes (Fig. 315) and on a cratera that came from Etruria (Fig. 316). The image of the mollusk does not have here the same character of truth as on the monumentr of the e earlier art. The artist could not have referred to the original; he was perhaps inspired by some intaglio or some Mycenaean jewel, that had escaped the wreck of that distant past. Horizontal lines traced by the point in the field perhaps represent the calm seain which was evolved the octopus.

Note 1.p.606. Histoire de l'Art. Vol.VI, p. 922-930.

When Corinthian manufacture produced the vases just described, it was already in full and rapid progress. The potter applied himself to revising and perfecting his forms. If the Oenochoe remains a little heavy (Fig. 317), the pyxis gains in height

[illegible]

[illegible] this division into superposed zones, which we find from Ionian oenochoes. (Fig. 364).

Soon between these bands of animals are seen to appear the [illegible] on the upper band are riders racing, on the lower one being a file of geese (Fig. 315). Such is also the case for a great oenochoe with open mouth and the neck occupied by two round[illegible] [illegible] limited by bands composed of red, white and black fillets. First zone; great female bust turned to right. The hair is cir- [illegible] est is covered by an ample peplos. This bust is placed betw[illegible] two lions, each followed by a swan. Second zone, two women [illegible] [illegible], facing each other and extending their hands. Seve[illegible] [illegible] ack bands. Here is recognised the representation of the chorus, that religious dance figured on the shield of Achilles, that [illegible] ture as well as on those of painting.[1] Third zone; a siren in the form of a bird with a woman's head between two lions; a b[illegible] bull and two other lions; a passing stag and a mule. Fourth zone; Three lions separate the passing mule, a goat, a swan a[illegible] and a ram.

[illegible] Vol. III. Figs 339; VII. Figs 59, 77, 86. This representation of the chorus is again found on a Corinthian pyxis discovered [illegible]

[illegible] decoration, this vase seems to be one of the most certain [illegible] ed the style that we seek to define. One notes the wise econ[illegible]

and is often ornamented by female heads modeled in the round. (Fig. 318). The cothon, the cup like a deep plate, the little amphora and the little dinos, make a little variety in the show pieces of the ceramist. The aryballa becomes longer and the alabaster also; thus to decorate it, the painter adopts this division into superposed bands, which we know from Rhodian oenochoes. (Fig. 304).

Soon between these bands of animals are seen to appear the human figure, slipping in as if hiding. Thus on the aryballa, on the upper band are riders racing, on the lower one being a file of geese (Fig. 319). Such is also the case for a great oenochoe with open mouth and the handle occupied by two rounds. (Fig. 320). The surface of the body is divided in four zones limited by bands composed of red, white and black fillets. First zone; great female bust turned to right. The hair is circled by a diadem and falls in a mass on the shoulders. The chest is covered by an ample peplos. This bust is placed between two lions, each followed by a swan. Second zone; two women standing, facing each other and extending their hands. Seventeen other women with profiles turned to right and with interlaced hands, forming a continuous chain with the two first. They have their hair hanging on the back; their clothing is the long tunic, sometimes monochrome anf sometimes ornamented by wide black bands. Here is recognized the representation of the chorus, that religious dance figured on the shield of Achilles, that we have already found more than once on the monuments of sculpture as well as on those of painting.[1] Third zone; a siren in the form of a bird with a woman's head between two lions; a b bull and two other lions; a passing stag and a mule. Fourth zone; Three lions separate the passing mule, a goat, a swan a and a ram.

Note 1.p.608. Homer. Iliad. XVIII. 590-606. Histoire de l'Art. Vol. III. Figs 399; VII. Figs 59, 77, 66. This representation of the choros is again found on a Corinthian pyxis discovered at Gela. Winged horses are there mixed with female dancers. (P. Orsi. Gela. Scavi del 1900-1905, 1906. Fig. 56).

By its exceptional height as by the entire character of this decoration, this vase seems to be one of the most careful works that came from Corinthian workshops at the time, when flourished the style that we seek to define. One notes the wise economy

of the composition. If the real or fictitious animals occupy a larger part of the field than the human figure, it is b[illegible]use this is most in view. The two upper ones are reserved for it. On what might be termed the front of the vase, the side opposite the handle, the painter has placed this bust of a woman, which by its much larger proportions than the animals between which it is placed, and arouses the idea of a colossal statue, perhaps of a statue of a goddess. Lower, the chorus presents a view of one of those rhythmic rings, which were a favorite amusement of Greek women on festal days. Their tradition has been retained through the centuries even in the popular dances of modern Greece. In the third band it is again the beauty of woman that is recalled by the head and long hair of the siren; but in around and above her, there are only animals, the painter has endeavored to place there, either by the [illegible] of the species figured, or by the attitudes given to them, a variety not often found in these files of beasts on the march. [illegible], such as the bull, ram and mule. The contrast is marked between the ferocious air of the roaring lions and the more placid appearance of the [illegible], between the elevated head of the great felines bearing their heads high and the movement of the herbivora towards the earth where they seek their pastures. Some care is manifested in the work that the decorator has imposed on himself to fill as richly as possible the fields of his bands. Nowhere has he distributed in greater number than here the secondary motives, such as rosettes, leaves of all forms, dots and points. Yet his brush is more discreet when in the course of this work, he has to fill the second zone. He has left more free space, he is satisfied to place two rosettes between each pair. He understood that his silhouettes of women would have more value and be better detached from the [illegible].

On other vases corresponding to the same phase of the art, the human figure introduces itself in the sa[illegible] into the midst of these processions of animals. Sometimes it is a rider or the running man.[1] On the bodies of aryballes appear some warriors, almost entirely concealed beneath their shields. The painter has thus avoided the difficulty of having to [illegible]

of the composition. If the real or factitious animals occupy a larger part of the field than the human figure, it is because this is most in view. The two upper ones are reserved for it. On what gimht be termed the front of the vase, the side opposite the handle, the painter has placed this bust of a woman, which by its much larger proportions than the animals between which it is placed, and arouses the idea of a colossal statue, perhaps of a statue of a goddess. Lower, the choros p presents a view of one of those rhythmic rings, which were a favorite amusement of Greek women on festal days. Their tradition has been retained through the centuries even in the popular dances of modern Greece. In the third band it is again the beauty of woman that is recalled by the head and long hair of the siren; but if around and above her, there are only animals, the painter has endeavored to place there, either by the choice of the species figured, or by the attitudes given to them, a variety not often found in those files of beasts on the march. Besides beasts of prey is the stag; there are domestic animals, such as the bull, ram and mule. The contrast is marked between the ferocious air of the roaring lions and the more placid appearance of the lionesses, between the elevated pace of the g great felines bearing their heads high and the movement of the herbivora toward the earth where they seek their pasturage. Some care is manifested in the work that the decorator has imposed on himself to fill as richly as possible the fields of his bands. Nowhere has he distributed in greater number than here the secondary motives, such as rosettes, leaves of all forms, hooks and points. Yet his brush is more discreet when in the course of this work, he has to fill the second zone. He has left more free space. He is satisfied to place two rosettes between each pair. He understood that his silhouettes of women would have more value and be better detached from the ground, if they were less encumbered.

On other vases corresponding to the same phase of the art, the human figure insinuates itself in the same fashinninto t the midst of these processions of animals. Sometimes it is a rider or the running man.[1] On the bodies of aryballas appear some warriors, almost entirely concealed beneath their shields. The painter has thus avoided the difficulty of having to draw

on, who extends her arms toward her. Two winged figures ... this group.(Fig. 321).

Note 1.p. 812. ouvre. Fall 4. 303 et seq.

These figures, parties or steeds, belong to the family of o-
... loves to show, rising in scattered rosettes. On the upper part of an oenochoe with five zones a bird with the head of a bearded man faced by a swan (Fig. 322). As for the siren, we have already met with her (Fig. 320), third zone. Elsewhere is the marine god with the tail of a fish and holding a fish in his hand.[2] He has a long beard, long hair and three pairs of fins. The forms are still more complex on a gobelet, whose large decorates another vase of the museum ... (Fig. 323). On her ...
whose feathers are alternately white, black and red, enclosed in a tightly fitting tunic bordered by embroidery, is joined the tail of a serpent, folded on itself twice. Elsewhere is the demon known under the name of the Persian Artemis, a woman standing and clothed in a long robe, who raises in both hands, seizing them by the neck or tail, sometimes two lions, sometimes a panther and a bird; she has one or two pairs of wings (Fig. 324).[3] Another genius in the attitude of a swift race has great wings fixed to the back, with smaller ones at the bottom of the legs, like the Greek Hermes.(Fig. 325).

Note 2.p.812. Wilisch. Fig. 41.

Note 3.p.81?. On the ... of the Ashmolean museum of Oxford, she holds a swan in each hand.

From the time that the human figure began to appear on this clay, it could not remain there as if lost in the medley of this capriciously luxuriant vegetation and of this incorrectly drawn fauna. It would be difficult for the painter to yield to the temptation of adding to the interest of his decoration by projecting on the surface of his vase the figures of gods and of heroes, that the poets had created and whom they continually labored to define and differentiate by traits more and

the body.[1] For the oddity of the motive may also be cited an aryballa, on which are represented two women facing each other. The larger of the two holds in the right hand a goose by the neck, and with the left hand caresses the chin of her companion, who extends her arms toward her. Two winged figures enclose this group.(Fig. 321).

Note 1.p.610. Louvre. Hall E. 594-600.

Note 1.p. 612. Louvre. Hall E. 606 et seq.

These figures, harpies or sirens, belong to the family of oriental divinities, of very different types, which the painter loves to show, rising in scattered rosettes. On the upper band of an oenochoe with five zones is a bird with the head of a bearded man faced by a swan (Fig. 322). As for the siren, we have already met with her (Fig. 320), third zone. Elsewhere is the marine god with the tail of a fish and holding a fish in his hand.[2] He has a long beard, long hair and three pairs of fins. The forms are still more complex on a goddess, whose image decorates another vase of the museum of Berlin (Fig. 323). To her shoulders are attached two broad wings recurved to a point, w whose feathers are alternately white, black and red, enclosed in a tightly fitting tunic bordered by embroidery, is joined the tail of a serpent, folded on itself twice. Elsewhere is t the demon known under the name of the Persian Artemis, a woman standing and clothed in a long robe, who raises in both hands, seizing them by the neck or tail, sometimes two lions, sometimes a panther and a bird; she has one or two pairs of wings ((Fig. 324).[3] Another genius in the attitude od a swift race h has great wings fixed to the back, with smaller ones at the b bottom of the legs, like the Greek Hermes.(Fig. 325).

Note 2.p.612. Willisch. Fig. 41.

Note 3.p.61?. On the aryballa of the Ashmolean museum at Oxford, she holds a swan in each hand.

From the time that the human figure began to appear on this clay, it could not remain there as if lost in the medley of this capriciously luxuriant vegetation and of this laboriously fanciful fauna. It would be difficult for the painter to yield to the temptation of adding to the interest of his decoration by projecting on the surface of his vase the figures of gods and of heros, that the poets had created and which they continually labored to define and differentiate by traits more and

more clear. The artist was sure to please all his patrons, Greeks as well as strangers, when he undertook to recall to s some and to make known to others by paintings with inscriptions added to make their meaning clear, the adventures attributed to those personages, all the marvellous tales related to the people by the Homeric rhapsodists. To better fulfil this office and without renouncing the ancient twpes that had borne everywhere the fame of his workshops, the potter introduced anew that furnished him with the most spacious fields in which his figures would be distributed more at ease. These vases of great height, on which the themes of the paintings are nearly all borrowed from mythology, we reach the last period of development of Corinthian ceramics, which both marks its climaxand the limit that it could not succeed in passing.

According to the observations that have been made on the tombs of Italy, in which are found Corinthian vases with plant and zoomorphic ornamentation, one can propose an approximate date for all that series of pieces; this would be about the beginning of the 7 th century, that this style commenced to succeed the entirely geometric style of vases called protocorinthian, and toward the end of the century, which had produced the works which do it most honor.[1]

Note 1.p.614. Pottier. catalogue. p.442-443.

4. Corinthian Vases with free Ground and Mythological Subjects.

If one seeks to classify in chronological order the Corinthian vases on which the human figure passes to the first plane, engaged in an action presenting a sense more or less clear, t a first group can be formed of those, which show us the potter still retaining with this change his former habits. The forms remain the same as for the past. The decoration continues as overloaded as formerly; but in this traditional frame the painter inserts personages, to which he claims to give an individual character and a historical value, by the arrangement of t the scene and by the accompanying legends.

Two pyxis can be taken as types of the vases of this first group. The first has its certificate of origin. It was acquired at Corinth in 1800 by the English traveler Dodwell, from a peasant that had found it very near there, in a tomb in the hamlet of Mertese.[2]

Note 2.p.614. Dodwell. A classical and topoghaphical tour t through Greece. 1819.

On the body are two bands of animals; on the cover is represented a hunt of a wild boar, which must be that of the wild boar of Calydon, although the names written beside the persons are not those found in the versions of the myth that antiquity has transmitted to us (Fig. 326). The dead man lying between paws of the boar is named Philon. Thersander faces the monster, sword in hand. Paeon and Andrytas attack him in the rear, one loosing an arrow and the other brandishing a spear. Before the boar the painter has placed one of those heraldic motives, that continually reappeared under the brushes of his predecessors, a bird between two winged sphynxes; but he had not known how to make use of the events of the chase to fill the entire field. To avoid embarrassment, he has placed behind Andrytas four other figures, to whom he has given the first names at hand, and whose role and meaning he has not clearly defined. Agamemnon holds the caduceus and makes a gesture of leave. A woman, Alea, appears to bid adieu to young Dorimachos ready to depart, and the second woman, Sakis, seems to accompany with her prayers the hunters already fighting with the beast.

The inscriptions and the figures are still more numerous on the other pyxis (Fig. 327). On the body is a file of heros of the Trojan cycle, Palamides, Nestor, Protesicas, Patrocles, H Hector and Memnon, some on horses and the others on foot. Even the horses have their names; Podarge, Balios, Orion, Xanthos, etc. Finally the last inscription makes the painter known to us; "Chares painted me." (Fig. 328). On the cover is a painted and incised band. Fourteen warriors march in file, turned to the right, each covered by the round shield that almost entirely conceals him (Fig. 329).[1]

Note 1.p.616. Unfortunately, this curious little vase was c cleaned with hydrochloric acid and then poorly washed. The continuous action of the acid that remained in the pores of the clay gradually caused to disappear persons and inscriptions. Several of these are no longer visible today.

It is easy tn understand why the inscriptions appeared then on the vases. If the ceramists took this method, it was in imitation od the first historical painters. Thus they did not f feel sufficiently certain of themselves to count on their pain-

ceintures, by the sole arrangement of the persons and by the characteristic traits given to each of these, sufficient to inform the spectator, who were the heroes placed in view there, and what were the episodes of the epic poem that the brush desired to represent. They thought of writing the names beside the figures.[2]

Note 2.p.816. Pliny. H. N.

The ceramic painters could not fail to follow this example. They were often forced by the narrowness of the fields at their [illegible] inspiring them, paintings on stucco or reliefs like those of the [illegible] [illegible]. whose presence in the painting would have aided in grasping the subject. If some part justified to that expedient, this was then in the decoration of these vases. They were not made solely to be sold to Greeks more or less familiar with the tales of what [illegible] barbarians, who had merely a very imperfect knowledge of all these fables. In making them spell the famous names of Hector or of Achilles, of Heracles or of Polynice, the legends informed them that the place of the scene was Troy or Thebes; they incited them to cause to be recited the episode of the poems aimed at by the painting.[1] Serves also to explain the insistence with which the Corinthian potters seemed to apply to the multiplication of the inscriptions, it was necessary to take into account another feeling, the desire requiring them to decorate their goods as much as possible. When beside the team of the chariot they wrote hippoi (horses), this could not be to prevent a mistake concerning the nature of the animal represented.[2] The legend was then useless; but the eye of the decorator found a certain pleasure in the curves of this series of letters described about the body and head of the persons. They added to the general effect. Like the points, triangles and rosettes, they played their role in this abundance of secondary motives in which the Corinthian potters took the pleasure more marked than did those of Athens.

Note 1.p.817. The fragment of an amphora found at Egina, from its style appears to furnish one of the most ancient examples, it has been said the most ancient, that possesses a legend in

paintings, by the sole arrangement of the persons and by the characteristic traits given to each of these, sufficient to inform the spectator, who were the heros placed in view there, and what were the episodes of the epic poem that the brush desired to represent. They thought of writing the names beside the figures.[2]

Note 2.p.616. Pliny. H. N.

The ceramic painters could not fail to follow this example. They were often forced by the narrowness of the fields at their disposal to give only a sort of abridgement of the works inspiring them, paintings on stucco or reliefs like those of the coffer of Cypselus. It might occur to them to have to suppress certain persons in these reductions that they executed, whose presence in the painting would have aided in seizing the subject. If some part justified to that expedient, this was then in the decoration of these vases. They were not made solely to be sold to Greeks more or less familiar with the tales of epic poetry. Many of their future conquerors were barbarians, who had merely a very imperfect knowledge of all these fables. In making them spell the famous names of Hector or of Achilles, of Eteocles or of Polynice, the legends informed them that the place of the scene was Troy or Thebes; they incited them to cause to be recited the episode of the poems aimed at by the painting.[1] Perhaps also to explain the insistence with which the Corinthian potters seemed to apply to the multiplication of the inscriptions, it was necessary to taxe into account another feeling, the desire requiring them to decorate their goods as much as possible. When beside the team of the chariot they wrote hippoi (horses), this could not be to prevent a mistake concerning the nature of the animal represented.[2] The legend was then useless; but the eye of the decorator found a certain pleasure in the curves of this series of letters described about the body and head of the persons. They added to the general effect. Like the points, triangles and rosettes, they played their role in this abundance of secondary motives in which the Corinthian potters took the pleasure more marked than did those of Athens.

Note 1.p.617. The fragment of an amphora found at Egina, from its style appears to furnish one of the most ancient examples, it has been said the most ancient, that possesses a legend in

Corinthian characters on a painted vase.(Studnicza. Ueber die Bruchstücke einer frühcorinthische Vase aus Aegina, in Athen. Mitt. 1899. p. 361-378).

Note 2.p.617. Louvre. Hall E. 637. Likewise on a vase found at Carystos, the inscriptions "hippodatas and hippostrophos" beside a warrior, who runs near one of the horses and the squire who mounts one of them.(Willisch, p.50).

These reflections particularly apply to the legends interpreting the subject. Further, they supply much the greater part to this epigraphy of Corinthian ceramics. Yet there are some that have a different character. There are signatures of artists, but in small number. We have already described the vase signed by Chares. The name of Timonidas, which we have found on one of the votive tablets of Pende-skouphia, is read on an aryballa on which is represented the adventure of Troilos surprised by Achilles at the fountain (Fig. 330). Timonidas m'egraphe."[1] Other inscriptions are also very brief and seem to designate the possessor of the vase; this is the case for two names; Diskylinos Petela, which are painted in great black letters beneath the handle of an aryballa of the Louvre (Fig. 331).[2] Another aryballa is cited, also found at Corinth, where on the handle and before a woman's head seen in profile are inscribed the words; "I belong to Aenetas," and below on the body are n nine names of men.(Fig. 332).[3] These names would be those of the donors that clubbed to make the gift of this vase to Aenetas, perhaps some beautiful young man of the Corinth of the Cypselides. What must have made the value of the vase is the complication of the various motives of ornament, that cover all the surfaces (Fig. 333).

Note 1.p.618. Klein. Die Griechen Vasen, etc. p.28-29. G. W Welcker. Timonidas (Athen.Mitt.1905 pp.199-206). We do not represent here among signed Corinthian pottery the vase of the Boston museum, on which is read the name of Pyrrhos, son of Argasileos. (Farbell, A signed protocorinthian type; in Rev. A Arch. 1902, p.41-46). This is indeed of protocorinthian type; but to judge of it by the alphabet used by the painter, it seems rather to have been made at Chalcis than at Corinth.The third name of the Corinthian painter, Milonidas, is read on one of the tablets preserved in Paris.

Note 2.p.618. Rev. Arch. 1899, p. 6-7.

Note 3.p.618. Rhasopoulos. Sopra un vasetto corinzio, etc. (Ann. dell' Inst. 1862. p.45-46, Pls. A, B).

Explanatory glosses and signatures of artists or owners, then become the inscriptions of a very common use after ceramic painters had become accustomed to seek in mythology the ordinary themes of their decoration; but even then they were not placed on all their vases. Here is an aryballa of spheroidal form that came from Camiros, but in which is recognized the white clay of Corinth (Fig. 364). It represents the suicide of Ajax. We find again the same scene arranged in nearly the same fashion but this time with the names of persons inscribed near them, beneath the handle of the great cratera, that is one of the the good works of Corinthian make (Fig. 335). On the aryballa is no indication of this kind. It is probable that the fresco seen somewhere at Corinth accustomed the eyes to this mode of arrangement of the theme. Ajax is entirely nude and has cast himself on his sword, which has pierced him through. His blood flows in streams. Diomedes and Ulysses are nude and without a arms, leaning over the dying man. They seem to dispute. Diomedes reproaches Ulysses for being the cause of this death, and Ulysses angrily rejects the accusation. In the group on the cratera, Ajax has the same height as his companions in arms and the drawing is much more correct; but there is less life and expression..The attitudes of the two persons are cold and restrained; they seem to be present at this agony with indifference.

For the small dimensions op the figures and for the character of the drawing, there may be compared the pyxis and the aryballa that represents the adventure of Ulysses among the sirens (Fig. 336).[1] In this composition is the naive search for expression, that is truly curious. Ulysses stands on his bark, fastened to the mast, behind which are crossed his arms in bands. The rowers face toward the open sea. On the contrary, Ulysses faces the sirens, two birds with women's heads who stand before the rock and have great open mouths to throw into space their seductive songs. Behind them is a seated woman, perhaps the earth, mother of the sirens. Farther off and very rudely figured is a house with flat roof and open doorway; it can sc-

scarcely recall other than the palace of Circe, which the hero has just left to risk himself again on the sea. Note the two birds, an eagle and a wader, that have lit on the bark. They serve only to complete the impression that should be left by this marine view, arousing the memory of those flights of fishing birds, which in long voyages attract the interest of the eyes of the sailors.

Note 1.p.620. H. Bulle. Odysseus und die Sirenen (Strenna Helbigiana, p.31-37).

No inscriptions in this painting. Nor are there any but the field is carger and the drawing more advanced in the painting of a little amphora that represents the return of Hephaestos that Dionysos brings to Olympos (Fig. 337).[1] The god is not mounted on a mule, as he will be later on other vases treating the same subject, but on a horse. He sits sidewise in the manner of a woman. He holds the reins in his right hand; with the left he carries to his lips a rhyton in the form of a horn. The deformity of his feet is indicated with a brutal frankness. Before him are two ithyphallice satyrs, one of whom raises a large cup in the air; by their great gestures, they appear to show him the way. Beside him in the second plane is another satyr holding a bunch of grapes. Behind is a woman clothed in the himation and the long tunic, perhaps Thetis, who had received a and cared for Hephaestos after he was cast from Olympus. Then comes the personage in whom in spite of his nudity, it is proposed to recognize Dionysos, the leader himself of the procession, by the grapevine loaded with graper, that he bears on h his shoulder. A last satyr closes the march. His left arm bends under the weight of a jug that will serve to fill the cups.

Note 1.p.622. This vase was described and studied by Löschke (Korinthische Vase mit der Ruckfuhrung von Dionysos in Athen. Mitt.1894, p.510-525, Pl. VIII.

Same absence of legends, same style and same movement in decoration of a little skyphos with two handles that came from C Corinth, and which represents one of the adventures of Hercules (Fig. 338). He had received hospitality in the cave of the centaur Pholos, who had opened in his honor a jar of old wine. Intoxicated by the drink, other centaurs had sought a quarrel with the hero. Hercules was compelled to drive away these monsters, who fled in disorder. He is nude; he has neither the

[illegible]

are great branches of trees that he throws at the aggressors. The forelegs of these centaurs are human legs, as in all the oldest images of this type. At one end of the painting, Pholos stands behind a table and the pithos from which came the drunkenness; his gesture seems to protest against the injury done [illegible] two deities, a god holding a sceptre and a goddess clothed in [illegible] decorated Athena, which Corinth placed on her coins.

Corinthian painters seemed to be pleased to retrace the exploits of Hercules, to whom they never gave the lion's skin as an attribute; but they gave him the bow, club or sword; sometimes they armed him with a stone or the branch of a tree. On an aryballe found at Gela is represented the combat with the hydra of Lerne.[1] On an alabastron of Syracuse is the strangling of the lion of Nemea.[2] Another alabastron from Samothrace shows the hero in combat with the Amazons.[3] On a lecythe found at C [illegible] ment of those on which appears the scene taken from the myth. It is still engaged in motives of pure fancy. There are opposite the centaur a figure that has nothing to do with this painting. Above her is a chase of a hare. We have indicated on one of the votive tablets of Penteskoufia the representation of [illegible].[4]

Note 1. [illegible] Vol. III, Pl. 48. *The Corinthian origin is attested by the form of the characters of the inscription.*

Note 2. p. [illegible]. Ann. 1877, p. 45, Pl. C, D, 2. There is recognized the whitish clay of Corinth in the material of the vase.

[illegible] *Revue des Universités du Midi. 1898. p.335-332.*

[illegible]

Of the [illegible] and forms, all these vases continue those of the preceding period; if they are distinguished from it, it is by the character of the decoration and by that of the subjects represented. In this series the favorite themes of the paintings, besides the labors of Hercules, are hunting the

lion's skin on his head nor in his hand the club or the bow, which more advanced art will give him. What he uses as arms are great branches of trees that he throwu at the aggressors. The forelegs of these centaurs are human legs, as in all the oldest images of this type. At one end of the painting, Pholos stands behind a table and the pithos from which came the drunkenness; his gesture seems to protest against the injury done to his guest. Opposite him and before the last fugitives are two deities, a god holding a sceptre and a goddess clothed in an ample mantle. Below the foot of the vase is a profile of a helmeted Athena, which Corinth placed on her coins.

Corinthian painters seemed to be pleased to retrace the exploits of Hercules, to whom they never gave the lion's skin as an attribute; but they gave him the bow, club or sword; sometimes they armed him with a stone or the branch of a tree. On an aryballa found at Egina is represented the combat with the hydra of Lerne.[1] On an alabaster if Syracuse is the strangling of the lion of Nemea.[2] Another alabaster from Samothrace shows the hero in combat with the Amazons.[3] On a lecythe found at C Corinth, Hercules chases the centaur Nessos who carries off Dejanira (Fig. 339). This little vase must be one of the most ancient of those on which appears the scene taken from the myth. He is again engaged in motives of pure fancy. There are opposite the centaur a lioness that has nothing to do with this painting. Above her is a chase of a hare. We have indicated on one of the votive tablets of Pende-skouphia the representation of the trick played on the Cecrops.[4]

Note 1.p.623. Ann. dell' Inst. arch. Vol. XIX, p. 103. Monum. vol. III, Pl. 46. The Corinthian origin is attested by the form of the characters of the inscription.

Note 2.p.623. Ann. 1877, p. 45, Pl. C, D, 2. There is recognized the whitish clay of Corinth in the material of the vase.

Note 3.p.623. Da Ridder. Une representation d'Amazones etc. Revue des Universities du Midi. 1896. p.385-392.

Note 4.p.623. Histoire de l'Art. Vol. IX.p.243, Fig. 112.

For the dimensions and forms, all these vases continue those of the preceding period; if they are distinguished from it, t this is by the character of the decoration and by that of the subjects represented. In this series the favorite themes of t the paintings, besides the labors of Hercules, are hunting the

wild boar, and either the scene remains indeterminate or the legends place under the walls of Troy the duel of two warriors, a group often completed by the addition of two squires, that are sometimes on foor and sometimes mounted on a chariot. On a cup found at Corinth is seen on one side the combat of Hector against Achilles, on the other that of Eneas against Ajax.. (Fig. 340). These heros are designated by their names; but the names inscribed near these secondary persons accompanying them are pure fancy.[1] Corinthian painters use very great freedom in that respect. When it does not concern a hero of mark, a champion, they place beside the person the first name at hand.

Note 1.p.624. Annali. 1862. p.56-59, Pl. B.

One also sometimes sees extended on the ground between the two enemies in combat, the wounded man or corpse. These combatants are nude or clothed only by short tunics; they do not h have the cuirass usually given to them by Chalcidian or Attic painters. On the shields, which are almost always round and very rarely oval, are emblems such as a swan, cock, serpent, head of a Gorgon, etc. (Fig. 341). In the same order of ideas, the painter has also represented the departure for the army; on an aryballa found in Eubea, but where the form of the letters attests a Corinthian origin, a warrior fully armed runs behind his two horses, one one of which is already mounted a squire.[1] This is perhaps the sports of the stadium that are r recalled by the two harnessed to the chariot and held in hand by the driver.

Note 1.p.625. O. Benndorf. Griechische und Sikelische Vasenbilder. Pl. XXX, 10.

Also numerous are the vases that represent the bacchanals. We have already seen the obscene and nude satyrs leap about Hephaestos (Fig. 337). Elsewhere these are dancers grouped in pairs and executing at the sound of the flute bold capers, quite near a great cratera into which two of them plunge their horns to drink. In a sort of caricature terminates the painting. In the 5 th couple is a dolphin instead of the person like the others and placed at the right. Thh bacchante facing it t tenders to it the rhyton, as if to invite it to take its part also in the brinking (Fig. 342). On the pyxis is the circle of women led by the same flute-player.[1]

Note 1.p.626. Furtwängler. Sammlung Sabouroff. Pl. XLVII,1.

In all these paintings are also rosettes scattered on the f field; but they are scarcer than on vases that plant and zoomorphic decoration. There are no longer the great spots as formerly, where the petals of the flower are separated by the incised line. What represents them is a circle representing the calyx, to which is attached a crown of fine and close points. Sometimes even these are replaced by some points carelessly placed around the circle. The grounds tend to be cleared. Sometimes the field is free from all accessories.

Henceforth Corinthian ceramists took into account the resources that they found, to interest their patrons in this new kind of decoration. Most of these paintings aroused the memory of the most brilliant and most varied fictions that ever nourished and enchanted the imagination of men. Other painters revived the emotions of the festivals demanded by this industrious people several times annually the forgetfulness of the daily effort and the joys of the passing folly. Already trained by long practice, the workman at Corinth was also sufficiently master of his art to feel himself capable of shaping and fixing vases, whose increased dimensions offered very spacious f fields to the brush, where withoy borders showing the lotus flowers and the traditional palmatiums, he could enclose the representation of more complex scenes. In the tombs of Etruria were found vases forminm this series, the last creation of Corinthian manufacture; but whether made in Corinth itself or indeed in Greek workshops founded in Italy, what proves them to have come from the hands of Corinthian workmen, besides the similarity of the procedures of execution and the elements of the decoration, is theppresence on many of them, of legends inscribed with letters that characterize the Corinthian alphabet.

If some doubts could remain on this subject, they would be removed by a discovery made recently in the course of the excavations, that the American School executed at Corinth. In 1896, from a well with walls built of Hellenic masonry, were taken in full baskets fragments of Corinthian pottery. And among the 8 vases that could be restored first in the museum of Athens was found one, that resembles in nearly all points the vases mostly coming from the tombs of Caere, that are called kelebes or crateras with little columns (Fig. 343); there were

further recognized in that multitude of fragments the remains of two others of the same kind.[1]

Note 1.p.627. R.B.Richardson. An old Corinthian vase from Corinth. (Am. Jour. Arch. 1898. p.195-205; Pls. VI, VII).

If the vases in question belonged to the Louvre, it would have its place marked in one of the richest and most curious series, which that museum owes to the acquisition of the Campana gallery. It would find its place near the head of that series and near the other crateras, which like it only present to view figures of animals marching in their single band or t two superposed bands.[1]

Note 1.p.628. Louvre. Hall E.

It does then not date from the time when the painters had become bolder and more skilful, and will assure to the human figure the enjoyment of at least two bands, between which is usually divided the surface of the body; but almost by that difference, it is defined by the more important of the characters, that distinguish those of these pieces on which the technics is wisest. Same dimensions; When the cratera had its foot, of which nothing was found, it measured about 15.75 ins. high. T The form is entirely similar. The decoration in its simplicity presents the same arrangements.

It is then proved that the workshops of Corinth produced vases of this kind. They created the type and brought it into fashion; but it is very possible that this type was commenced at Corinth and continued in Italy. Even before the results of the excavations had suggested this hypothesis, there could be invoked in its favor the evidence of the ancient authors. According to them, at the time of the revolution that substituted at Corinth the democratic tyranny of Cypselos for the aristrocratic government of the Bacchiades, several members of the f fallen family taking with them in their suite a number of their followers went to establish themselves with the Etruscans, with whom they had long maintained friendly relations. The wealth carried with them and the superiority of the civilization represented by them availed for such an ascendancy, that Demaratos, one of these immigrants became king of Tarquinii, now Corneto. Tarchnas, his son by a native women became under the name of Tarquin the 5 th king of Rome.[2] Very near the city in which D Demeratos had sought refuge was another, Agylla, now Cervetri,

whose founding was attributed to Thessalian Pelasges, and which from antiquity had been in close relations with Greece. The Agyllans were so well recognized as Greeks, that they participated in the cult of Apollo Pythios; they had obtained permission to build at Delpni the treasury intended to contain their offerings. They had in their hands the entire commerce of the Tyrrhenian coast, and their opulence exposed them to the covetousness of the Etruscans. We do not know when, but the latter took possession of Agylla, which then took the name of Caere.[1] Before that conquest, when Demeratos and the Bacchiades landed in Italy, a certain number of those immigrants could settle at A Agylla. They found there surroundings that differend less than Etruscan cities from those where they had previously lived. Excavations confirm this hypothesis. From the tombs of Caere came the richest series of Corinthian vases of the more recent style, those entering the Louvre with the Campana collection.

Note 2.p.628. Pliny. H.N. XXXV, 16, 152. Tacitus. Ann. XI,14. Dionysios. H. III, 46. Strabo. V, 22; VIII, 6, 20.

Note 1.p.629. Strabo. V, 2.

The texts attest not only that the notable part of the Corinthian nobility came about the middle of the 7 th century to d demand an asylum in Etruria; they authorize us to affirm that at least one of the industries of Corinth, that of the workmen who wrought and decorated clay, profited by the occasion to c create then branches in the Etruscan land. Strabo says that Demaratos "embellished Etruria by the artisans that followed his flight." [1] Pliny specifies more. According to him, Demaratos was accompanied into Etruria by "three modelers, Erecheir, Diopus and Engrammos, who taught to Italy the plastic art." [2]

Note 1.p.630. Strabo. V, 2,.2-3

Note 2.p.630. Pliny. H. N. XXXV, 152.

Whether in these three names it is necessary to see symbolized abstract terms and different aptitudes required from the good worker in clay,[3] or names given to sons in the families of artisans matters little. What appears certain is, that the memory was preserved of the role that the intervention of Corinthian manual skill had played in the devilopment made among the Etruscans in all the arts of clay about the end of the archaic age.

The members of these colonies of artisans could be maintained

and renewed on several occasions by borrowings from those of the metropolis; it is perhaps to the aid of these recruits that it must remain faithful during the very long time to the repertory and the fabrication of the school from which it came. For the mastery to weaken in those foreign workshops and the taste change, it would be necessary for at least two or three generations of workmen to succeed each other there. It would be vain to seek to distinguish from each other the most recent vases of the Corinthian style brought from Greece and those m made in place in Etruria by groups of exiles; it is right to carry all to the credit of Corinthian industry. 4

Note 3.p.630. Eucheir is "the skilful modeler" and Eugrammos is the " skilful painter." In Diopos it has been proposed to see him that pierces the vent hole in terra cotta. Others connect this name to the words dioptes or dioptra, which designathe waterlevel.

Note 4.p.630. On the attempts that have been made and the m means proposed for distinguishing the vases made at Corinth itself from those made in Italy, see Willisch, p. 112-117. There is truly no notable difference when one finds himself in the presence of counterfeits due to Etruscan workshops, since these must finally be able to furnish at a low price products resembling those costing very dear, because they were due to foreign skill, whether exercised in Greece or in Eturia.

The dominating type in this series that of a very low cratera on a foot and with a very wide body, that is called cratera with little columns because of a very peculiar form of handles. (Fig. 344). These are composed of two pieces, a detached vertical, frankly oblique or nearly straight from a reentrant part of the vase and a horizontal bar that it supports at its end. This bar is only the prolongation of the lip of the vase. On most of these crateras, the field is divided into two zones of unequal height. The upper one occupies two thirds of the space. This width is given to it, so that the painter could treat the subject at need comprising the placing in file quite a great number of persons, one of those mythological scenes, od those figured tales that the taste of the day then required from the master potter. He had further not lost the tradition of files of animals and horsemen, which formerly occupied the entire field. On some of these crateras, these files still occupy two

[illegible] in the entire decoration. The artist relegates them to the low- [illegible] ered in the old bands, and has grouped only figures without special significance, the field is encumbered by rosettes and [illegible] ancient of all, those representing the experiments of the Corinthian potter, when he sought to seek the mode of ornamentation better suited to the new type of vase that he created. When he found it, the field was cleared. Rosettes and other floriages became successively rarer; they end by disappearing. A sure instinct guided the artist; the freer the fields are from all surcharge, he has understood that his figures will take a [illegible].

Note 1.c.631. Louvre. Hall E, 635, 628. Also sometimes is only [illegible]. In the lower part of the field is a wide black band.

To give an idea of the importance and style of the vases of this kind, one cannot better choose than the crater that represents Hercules seated at the banquet table with Eurytios, King of Oechalia.[2] Fig. 546 gives the entire vase. Fig. 549 reproduces in line all the details of the principal scene, the banquet of Hercules with Eurytios.

[illegible] figures are arranged in two bands.

First band. Eurytios gives hospitality to Hercules. The king had promised his daughter Iole to whoever excelled himself in [illegible] and claims the prize; but Eurytios preferring to the advice of his eldest son Iphitos the counsel of his other sons, refuses to give Iole to the hero. Later, Hercules slays Eurytios and his sons, carries off Iole, and then Dejanira is inflamed by [illegible] ous blood of the centaur Nessus.

In one half of this band, the artist has represented the repast offered by Eurytios to his guest. All the guests are extended on couches before which are placed tables on which near

zones;[1] but nn most vases they play but a quite secondary part in the entire decoration. The artist relegates them to the lower band that attracts the eyè less. Where the painter has retarded in the old habits, and has grouped only figures without precise signification, the field is encumbered by rosettes and other accessories. The crateras of this sort are certainly most ancient of all, those representing the experiments of the Corinthian potter, when he sought to seek the mode of ornamentation better suited to the new type of vase that he created. When he found it, the field was cleared. Rosettes and other flourishes became increasingly rarer; they end by disappearing. A sure instinct guided the artist; the freer his fields are from all surcharge, he has understood that his figures will take m more importance.

Note 1.p.631. Louvre. Hall E,565, 623.Also sometimes is only one decorated zone, where birds alternate with lions (570). In the lower part of the field is a wide black band.

To give an idea of the appearance and style of the vases of this kind, one cannot better choose than the cratera that represents Hercules seated at the festal table with Eurytios, king of Oechalie.[2] Fig. 344 gives the entire vase. Fig. 345 reproduces in line all the details of the principal scene, the repast of Hercules with Eurytios.

Note 2.p.631. Longperier. Musee Napoleon III, Pls. 66, 71, 72. Before entering the Louvre, the vase was published by Welcker. Mon. dell' Inst. Vi, 33; Annali. 1859, p. 243-257, Pl.K.

Clay white, fine and compact. Glazinm very pale yellow. These figures are arranged in two bands.

First band. Eurytios gives hospitality to Hercules. The king had promised his daughter Iole to whoever excelled himself in drawing the bow. Hercules presents himself, obtains the victory and claims the prize; but Eurytios preferring to the advice of his eldest son Iphitos the counsel of his other sons, refuses to give Iole to the hero. Later, Hercules slays Eurytios and his sons, carries off Iole, and then Dèjanira is inflamed by jealousy, sends to her spouse the tunic dipped in the poisonous blood of the centaur Nessos.

In one half of this band, the artist has represented the repast offered by Eurytios to his guest. All the guests are extended on couches before which are placed tables on which near

the cups are set places, that seem to be filled by cakes of c conical form. The young Iole alone stands between the table of the god and that of her brother Iphitos. She turns her head toward the latter, as if modesty forbids her to gaze in the face of the conqueror, to whom she will soon belong. Her long tunic falls to the ankles;;The shawl that drapes her is cast on her shoulders and also descends very low. As for the men, they seem to have no clothing other than an ample himation, in which is enveloped all the lower part of the body and the feet. If the painter has placed Iphitos in view almost at the centre of the painting, this must be because of the feeling of goodwill to a god, that tradition attributes to him. The three other beds bear Eurytios and his three sons, Didaeon, Clytios and Toxeos; These are arranged in the same order as named in three verses of Hesiod.[1] The names of these persons are inscribed over the heads in Corinthian characters.

Note 1.p.632. Hesiod. Fragmenta. XLV, edit. Dübner.1840,p.52.

Before the beds are seen to hang the coverings with fringed borders that cover the top. The guests each have a cushion beneath the left elbow. All with different gestures and with the right arm raise the cups which then bring to their lips; Hercules alone leaves his on the table. He holds a knife in his hand, as if he already prepared himself for acts of violence.

The tables are of bronze; one divines by the slenderness of their forms and Their yellow color. Here is the tone which serves to recall that of metal in antique paintings. Elsewhere in several museums are fragments of the same kind in bronze, where are found the lions' feet with claws that are seen represented here. These tables must have three feet,that can be inferred from the mode of presentation adopted by the painter for the lions' paws in this Fig. Only two are visible for each table. One of these is seen in front and the other is in profile.

There will be noted the dogs fastened to the legs of the beds. Their office was to quickly cause to disappear the remnants of all kinds, which the diners in heroic times carelessly threw on the tamped area, which formed the floor of the palace halls. There are four in the picture. One of them gnaws v vigorously the bone that he holds between his paws; the other three are watching with raised heads, prepared to seize the first bit that falls from one of the guests. Our painting is

the living commentary of the expression, "dogs of the table," which is found in Homer.[1]

Note 1.p.633. Homer. Odysses. XVII, 309. these dogs or floor scavengers are also frequently shown in scenes of feasts on t the archaic funerary coffers of Etruria, on those of White stone. With dogs are seen geese occupied in the same purpose. ((British Museum. Etruscan hall. Nos. 10,12,14, cists from Chiusi).

The painter has not occupied himself by imitating in the representation of this scene the colors given to it by nature. All is pure convention there. For the faces of the men it has u used red, on which the hair and beard are detached in black. On the contrary, black has served for the torso and arms; thus he makes them prominent on the red drapery that encloses these nude parts. Yet it has adhered to marking the difference between the flesh of men and that of the only woman represented h here. On the face of Iole, her hands and feet, it has retained the pale tint of the ground. Some intention to distinguish the sexes in drawing the eyes. That is almost round for the men; narrower for Iole and has the form of a very elongated oval. Shown in a long mass, the hair of the men does not descend below the nape. As for the young girl, she has a long and floating mass of hair that falls on the shoulders.

This painting is particularly interesting from the inscriptions accompanying it, by the singularitn of certain details a and the precisony with which they are treated, and finally by the rarity of the subject. Corinthian art often repeats itself, yet it furnishes no other example of this scene. We shall pass more rapidly over the rest of the decoration.

Beneath the handle on the right side is a bearded person, clothed in a short tunic, who carves the meats, aided by a young servant that holds the ham of the animal. Behind this group is seen the great footless jar set on a raised support; on the rim of this receiver is set a pitches intended to draw the wine, which will be poured intn the cups.(Fig. 346).

The second side represents the combat, perhaps that in which the two Ajaxes contend to prevent Hector from carrying away t the body of Patroclus. [1]

Note 1.p.634. Homer. Iliad. XVII. 155, 158.

In this group are three warriors (Fig. 341). In two other

groups of combatants are crossed in pairs. All have helmets
[illegible]
their legs covered by greaves; two of them are alone covered
[illegible]
shoots the arrow. He is equipped with a quiver with cover fal-
ling behind.

Between the left handle, Ulysses and Diomedes are present at the death of Ajax, son of Telamon (Fig. 355). Thus each composition placed under the handles is connected by its subject to one side of the vase.

Lower band. Twelve horsemen, clothed in a short tunic and a [illegible] horses at a gallop. Above one of them flies the bird. (Fig. 344).

On the horizontal plane of the rim is a file of 25 real or fabulous animals. 3 lions and 3 lionesses, a running hind, 2 dogs racing toward 2 hares, that come in the contrary direction and are accompanied by 3 flying birds, 4 winged sphynxes [illegible] a passing ram, a swan with wings spread.

On the little square plates that surmount the handles, there are two horsemen galloping to the right, and a hunter pursuing a stag and a hind (Fig. 347). The latter is struck by a spear and the blood flows. The upper part of the body below the start of the neck is decorated by a rich garland of flowers placed on interlaced branches. Around the foot diverge painted leaves in form of [illegible].

[illegible] dates. Here clinched his fists and lying is seen the herald [illegible] ; but it is particularly subjects borrowed from Trojan and Theban myths, which seem to have been in favor. The Corinthian painters further do not seem to have usually worked, as we should say, with the book under their eyes. In their work it is rare that the scene exactly corresponds in attitude, number and names of persons gathered there to a given episode of the Iliad or Odyssey. By the liberty taken by the artist to h
[illegible]

groups of combatants are opposed in pairs. All have helmets w with high crests and use a spear with long iron head. All have their legs covered by greaves; two of them are alone covered by cuirasses. The others have only shields on which are painted various emblems, the cock, rosette , the forepart of the lion, crescent, etc. At each end of the painting, the kneeling archer shoots the arrow. He is equipped with a quiver with cover falling behind.

Beneath the left handle, Ulysses and Diomedes are present at the death of Ajax, son of Telamon (Fig. 335). Thus each composition placed under the handles is connected by its subject to one side of the vase.

Lower band. Twelve horsemen, clothed in a short tunic and h holding a stick in the left hand, driving to the right their horses at a gallop. Above one of them flies the bird. (Fig. 344).

On the horizontal plane of the rim is a file of 23 real or factitious animals. 3 lions and 3 lionesses, a running hind, 2 dogs racing toward 2 hares, that come in the contrary direction and are accompanied by 3 flying birds, 4 winged sphynxes with womens'heads, a swan, a bird with griffin's head, a goat, a passing ram, a swan with wings spread.

On the little square tablets that surmount the handles, there are two horsemen galloping to the right, and a hunter pursuing a stag and a hind (Fig. 347). The latter is struck by a spear and the blood flows. The upper part of the body below the start of the neck is decorated by a rich garland of flowers placed on interlaced branches. Around the foot diverge painted leaves in form of stripes.

Other adventures of Hercules are represented on certain crateras. There clinching his fists and lying is seen the herald of king Ergimos, who raised a tribute of 100 oxen from the Thebans; but it is particularly subjects borrowed from Trojan and Theban myths, which appear to have been in favor.+ The Corinthian painters further do not seem to have usually worked, as we should say, with the book under their eyes. In their work it it is rare that the scene exactly corresponds in attitude, number and names of persons gathered there to a given episode of the Iliad or Odyssey. By the liberty taken by the artist to b bring together in the same painting persons, that in epic poe-

poetry belonged to different scenes of the drama, it is divined that he often took as themes and the names placed on his f figres from the fund of current traditions in a sort of epic folk-lore, rather than in the text itselfof the Homeric or cyclic poems.

Note 1.p.636. Louvre. Hall E, 633. View of the whole (face and reverse) in Pottier. Vases antiques etc. Pl. 47.

Note 2.p.636. This has been very well shown by Willisch in numerous examples. p.82-84.

It was especially so for certain scenes that had long been commonplaces in painting on clay, for scenes such as the departure of a warrior taking leave of his family before going to the battle, and the duel of his heros or the exposition of the corpse. The arrangement of these scenes was given by the tradition of the workshops. It was reproduced with several variants, and near a person wereiinscribed almost at random some of the names that had been heard in recitations of the rhapsodyes. Y Yet there are shown in these same paintings that give reason to think, that the tales of the Iliad, and an Iliad very simiar to our own, were familiar to the mind of the author of the picture. It is believed that this familiarity is found indicated in certain details, where the poet deviates up to a certain point from the text under our eyes. Sometimes he seems to have desired to sum in a composition as a sort of synthesis t the most marked traits of a certain episode, even of an entire song.[3]

Note 3.p.636. C. Robert. Iliasscenen in der altkorinthischeen Vasenmalerei. (Hermes. Vol. XXVI, p.387-393. 1911.

On one of these vases, Hector is represented as leaving for the last combat.[4] The painting was very careful, but unfortunately is poorly preserved. Hector says farewell to his parents Priam and Hecuba, while standing on the chariot, and the squire Kebionas restrains the horses. Women, sisters of the hero, Polyxena and Cassandra, companions in arms, Hippomachos and diaphonos, are present at the scene. Several horses are named. ((Korax, Kianis, Xanthos). This is a very picturesque painting.

Note 4.p.63.. Louvre. Hall E. 638. Published by Braun. Annali. 1855. p. 67. Monumenti. Vol. XXVI. View of the whole (face and reverse) in Potties, Pl. X.

This is a scene of the same kind that is represented on another cratera, that also came from Caere. Amphiaraos, victim of an oath that bound him, was forced by the infidelity of his w wife Eriphyle to enroll himself in that expedition against Thebes, fro which he knew that he would not return. He springs on his chariot, but he turns his head in the movement of sadness and of anger toward the group formed behind him by his children and his faithless spouse. So that the spectator should recognize her at first sight, she holds in her hand the necklace of pearls, the price of her perfidy. The nude youth and two girls hold up supplicating hands to the hero. Behind this group is a theird woman making the same gesture, bearing a very young infant on her shoulder. This must be the nurse, by more than one Attic tragedy is known the role played in the family by this servant, sharing the joys and sorrows. From these attitudes it is divined, that if Amphiaaos at the moment of his departure does not plunge into the heart of Eripyle the sword in his hand, this is because he yields to the prayers of his children. Before the chariot is a woman that hands to the driver Baton the farewell cup and two servants. One of them is standing and the movement of his raised right hand indicates his attention given to the scene. The other is seated with head bowed; he carries the right hand to his brow. This is known by more than one monument of painting and of sculpture. It is the expression of profound sorrow. In the voids left between the figures are different animals, a bird, serpent, lizard, hare, hedgehog and owl. These accessories only serve there to fill the field. At the back rises the palace that Amphiaraos leaves to return there no more (Fig. 348). On the other side of the vase is the picture of the games celebrated at Iolcos at the funeral of Pelias (Figs. 349, 350, 351).[1]

Note 1.p.638. Ann. dell'Inst. 1874. p. 82-110. Monum. Vol. X, Pls. IV, V.

It is known from Pausanias that these two scenes were combined in some manner on the coffer of Cypselus.[2] The description that Pausanias gives of the scene of the departure could almost be applied to the painting of our vase. Same indication of the house; same name of the driver; same grouping of the persons; same movement given to Amphiaraos. Whether the painter copied one of the compartments of the coffer, or that he and the cer-

ceramist were inspired by the same model, some grand fresco s seen in Corinth. The correspondence is less exact for the scene of the games. On the coffer, the carver had represented the five competitors whose entirety formed the pentathle. Here the painter disposes of less space and has represented only the wrestling and the chariot race; but five names of persons cited by Pausanias are found in the inscriptions of the vase. Then there is nothing that excludes the hypothesis of a partial borrowing made from the decoration of the coffer, or at least recourse to a common source.[3]

Note 2.p.638. Pausanias. V. 12-4.

Note 3.p.638. As examples of episodes that appear to have b been more rarely attempted by the painters, there may be cited the grief of Achilles, who after the death of Patrocles received the consolation of his mother, on an Oenochoe found at Corinth and on an aryballa discovered in Etruria, that of the battle which occurred around the famous wooden horse, when the Greeks concealed therein left its sides to scatter in the surprised city.(Fröhner. Trojanische Vasenbilder in Jahrb. 1892. p. 25-31, Pls. I, II).

On these two vases are no longer placed as on the more ancient vases, as again in the repast of Eurytion (Fig. 345), all behind each other, all in the same plane. The painter is not embarrassed by arranging several planes in his picture. Thus in the departure of Amphiaroas, there is at the back the house with its Doric entablature. Between this and the figures of t the first plane is a woman, whose body is partly concealed by the horses harnessed to the chariot. In the scene of the departure of Hector, there are even more of those in the second line with bust and head showing over the backs of the horses or the broad shields that cover the warriors occupying the front of the picture. The artist has desired to give depth to this painting. He has adhered to showing some behind the others in the race celebrated in honor of Pelias, the bodies of the horses of each quadriga, their necks and heads with varied movements. There is an attempt to place it in perspective. Whatever may be the errors which it would be easy to disclose, we must give credit to the painter for his intention and effort (Fig. 349). Beneath one handle, opposite the chariots at full speed, are represented three old men that must be the judges of the comp-

competition, one of whom is Acastos, son of Pelias, and another is Pheres, the father of a son-in-law of Pelias, The movement of these three persons indicates the attention with which they follow the race that they witness. The tripod before them alludes to the prize which they are to award (Fig. 350).

Beneath the other handle are two nude wrestlers that represent one of these competitions of the pentathle, that according to Pausanias were all five represented on the coffer of Cypselus, in the representation of the same games. One of the wrestlers is Peleus. To show that the hero is quite young, the painter has placed no beard on his chin. On the contrary, Peleus has a bearded person, Hippalkimos, one of the Argonauts, as an adversary. Between the legs of the two wrestlers is an elegant palmatium, and on the field is a lizard (Fig. 351).

Below the wide band filled by these two paintings extendsaa narrow band, on which the painter has placed on one side horsemen galloping, and on the other are warriors on foot fighting in pairs. No names are inscribed near these persons; this is because these images of riders and foot soldiers are only pure decorations. Thus we give only extracts from these two paintings (Figs. 349, 352). To complete the description of the appearance of this vase with such rich ornamentation, there only remains to mention the Gorgon's head painted on each of the f flat tablets by which the upper end of the handle is joined to the rim of the vase.

It is not alone by this superposition of figures that the p painter has shown the benefit derived from his models. In the paintings of most of the crateras in question, there is an entirety of the composition which attests more clearly still the progress realized. The figures no longer follow singly as in those processions of animals and of genii, which decorate the most ancient vases of Ionia and of Corinth. Then are no longer placed there in pairs or threes, as in those images of combats in which we have recognized the first attempts of a wiser decoration. Yet the opposed parts of the painting, there is not here an exact correspondence without some coldness, but persons opposed, who march in the opposite direction, converging to a central group or a point, that is the tripod in the chariot race, the prize of victory and placed before the judges of the competition. This arrangement admits sufficient liberty that

one may have the impression of life and of its diversity; but a certain symmetry still controls the entire arrangement; it gives to the plastic work the unity sought in vain in those r reliefs of Assyria and persia, that have a beginning but can never have an end, all the actors in the scene passing in order under the eyes of the specator. One here feels in this entirely novel method in art the superiority of greek genius.

If in the paintings of his crateras, the Corinthian ceramist has departed from those monotonous files, he has not known how to free himself from another servitude there. He has always remained faithful in the arrangement of his decoration to the traditional division in superposed bands, except in the rare cases in which he has replaced them by a sort of frame that recalls the metopes of the Doric frieze. Placed on the middle of the body, this frame can receive figures of only very small height. This is yet more limited by the division of the field in three, or as on the vases of the most advanced style, in t two paraleel bands. Even on those pieces of the greatest dimensions, I find no persons with heights exceeding 4.72 to 5.51 ins. Figures are thus compelled not to take the importance which they acquire, where as on the Attic amphoras and crateras they develop at eacs in the entire field from the foot to the shoulder of the vase. The design cannot have here the amplitude and firmness that the brush will place there soon, where it will dispose of wider spaces; on Corinthian vases it always remains abrupt. The muscles are never indicated there in vigor. The elgs and arms are sometimes weakly attached and almost thin. 9n the tracing of the body and members here is that slightly dry precision, which at Athens even on archaic vases allows to be diviyed the pleasure taken by the painter in studying and rendering the inflexions of the living form. The Corinthian c ceramist is the artisan of rare skill; but he is less an artist than are his Ionian or Attic rivals. He has not renounced with sufficient resolution the old routine, of what perhaps prevented him from disengaging himself from them in time, as did his rivals, that he did not have the advantage of working like them in one of those atmospheres of great art, that of inventive and original sculptors, which contributes by the examples that it gives, to arouse and cultivate the taste of the humblest workman, who counts in his service the industries,

which aspire to charm the eyes by images woven in fabrics., c cast or raised in metal, modeled in clay or placed by the brush on the sides of vases thrown by the potter.

We have insisted on those vases with subjects borrowed from epic poetry, and have taken one of them as a type. This is because they have seemed to us as the masterworks of the Corinthian ceramists, as those best furnishing the elements for a just appreciation of the qualities, that they attained and the defects which they did not know how to avoid; but these themes are not the only ones on which they exerted themselves at the time when their art rose to its climax. Painters also loved scenes taken from the events of private life. One of them has represented a nuptial procession. The husband is named Eurybates and stands on a chariot with his wife, who lifts the veil on her head with her left hand. The couple are surrounded by their friends, that utter noisy exclamations in their honor. What these artists have reproduced elsewhere with very marked predilection are those feasts, where must be displayed much luxury in "opulent Corinth," as celebrated by Pindar.[1] We have several of those paintings.[2] In that with most amplitude and curious details (Fig. 354), there are four beds side by side, before which are placed little tables supporting drinks and meats. On each bed is a couple, a bearded man and a half nude woman, a courtesan. Of these persons have have in hand drinking horns or vases. On the field are accessories hung on the wall. These are cithers; a guest turns to take one of these instruments. There are also arms and helmets. There is a view of the interior of a rich house in the Corinth of Periander. Here is an account of the appearance that the dining hall presented on a feast day.

Note 1.p.843. Louvre. Hall E, 637. Entire view in Potties,Pl.L.

Note 2.p.843. Louvre. Hall E. 623, 624, 629.

Painters who have thus applied themselveu to render the appearance of noble dwellings and sumptous apartments have had no taste for landscape, and the contrast is curious. Then do not seek to localize by picturesque details the scenes that then represent. Nowhere in even the paintings best devoted to that kind of indications, they have not attempted to offer even a sketch, or to give an impression, as freely did Ionian painters.[1] A fish suffices ho recall the sea and a branch the forest.

A diligent critic affirms to have never found but three trees in all Corinthian ceramics.[2]

Note 1.p.644. See above, p. 559-560.

Note 2.p.644. Willisch. p. 96.

Another theme that enjoys no less favor is that of the burlesque dance (komos) od the companions of Dionysos. One of those vases of that kind attracts attention by the variety of poses and the twisted hips that characterize all the persons. (Fig. 305).[3] At the middle of the picture is a satyr who makes a great spread in front. At right and left of him stagger as if overtaken by wine, or bound with spirit, the body projected forward or backward. Elsewhere is found the same movements in persons, most of whom do not have the great beard that characterizes the satyrs. These are joyous guests that frisk after the feast (Fig. 342).

Note 3.p.644. Louvre. Hall E. 620.

There is an example of the mode taken for the decoration of some crateras. As here, some of the black tint laid on the greatar part of the body, enclosing a light field reserved for the figures. This is what is termed the arrangement in metopes. If it is only shown exceptionally on crateras, it is the rule on another series, that of the amphoras, hydrias and oenochoes. Gathered in the tombs of Caere, these vases differ from crateras only in their forms, that are scarcely found among the monuments of ceramics collected in Corinth or in the vicinity: they are again distinguished by their entire appearance; yet one cannot avoid crediting them also to the Corinthian manufacture. The Corinthian alphabet is recognized in the inscriptions. According to the appearance, these are the products of some w workshop founded in Italy by workmen that came from Corinth' they soughht success in certain innovations, in contrasts of tones, in the novelty of many ornaments borrowed from foreign models.

There cannot be cited here a more significant example of metope vases than the amphora, one of whose faces we reproduce,, on which is represented a cavalier Polydos galloping. (Fig. 355). On the other face of the amphora are two busts, one white of a woman, the other black of a bearded man. These are perhaps Dionysos and Cora that it was desired to represent.

Here will be noted one of the traits that form the originiaity of tee vases of this series. White retouches plan the more important part there than in the other works of Corinthian workshops. The painter only employs them to distinguish the flesh of women from that of men. See the amphora which represents Tydeus ready to strike his faithless spouse Ismene with the sword. (Fig. 356). The same white served for the nude torso of Ismene and for the body of the lover Pereclymos, who flees without n having time to resume his clothing. There is also much white in the painting of the hydria on which are figured the funeral rites of Achilles wept by the Nereids; all the women have white faces and arms (Pl. XXII).[2] It is the same for the decoration of an oenochoe, a decoration that also merits mention for the boldness of the method that the artist has taken (Fig. 357).[1] He has placed there a chariot with four horses seen in front view, mounted by the driver Aniochidas and the warrior Laeptemos. The two white horses in the middle bend their heads symmetrically toward each other. The two side horses are black w with white manes, leaning their heads outward.

Note 1.p.645. Pottier. Vases antiques. Pl. LI, 645.

Note 2.p.645. Louvre. Hall E. 643. Published by Conze. Ann. 1864. Pl. OP.

Note 1.p.646. Louvre. Hall E, 648.

A hydria represents the departure of Hector to the battle ((Fig. 358).[2] It is particularly curious for the detail and the character of its ornamentation. The posts and the white squares inclosing the painting do not belong to the ordinary repertory of the Corinthian painters. Also rising in white on the black ground are large volutes and lotus flowers, which by the freedom of their charm recall the style of the Ionian ornamentists. (Fig. 310). The origin of the vase would be doubted, if in the name of Hector were not found one of the letters peculiar to the alphabet of Corinth.

Note 2.p.646. Louvre. Hall E. 642.

Not only by the importance and the interest of the themes r represented there are distinguished their predecessors, the v vases that represent the last effort of Corinthian pottery. The technics is also perfected. At that epoch the pottery for the field on which his persons are profiled, was not satisfied

with the pale tint taken by his clay in passing through the kiln. Under the influence of those Ionian and Attic models met everywhere in competition, he undertook to give his vases a glaze of warmer color; he sought tones approaching red or orange yellow. (Pl. XXII). He obtained this result either by using a reddish clay similar to that of the Attic workshops, or by partially covering the surface of the vase with a yellowish coating.[2] There are even some vases in very small number, where the field has been covered by a white coating.[3] Finally, what again contributes to diversify the appearance of the Corinthian vases of that time, is the custom of painting in black the entire image of the nude person save exceptions. On the figures of m more than one painting, the faces and necks are painted red.[4]

Note 1.p.647. Louvre. Hall E. 621-626.

Note 2.p.647. Louvre. Hall E. 640-651.

Note 3.p.647. Louvre. Hall E. 565.

Note 4.p.647. Louvre. Hall E. 635, 642.

If there are monuments that permit appreciating at its true value the professional skill and surety of hand that the ceramist painter has acquired at Corinth in this last period of development of his art, these are the series of those little perfume vases, generally oval flasks whose paintings have been c compared for the refinement of their execution to the miniatures of our manuscripts of the middle ages and the Renaissance. As decoration are varied ornaments, files of animals and of persons. The incised lines, that here complete the work of the brush, and the touches of the red coating suffice to date these works, which men had not known at first how to distinguish from protocorinthian,to which they have no relation other than the general form, one required by the purpose of the vase. [1]

Note 1.p.648. This confusion was mentioned in the interesting Article by an old member of the school of Athens, Louis Couve, whose premature death was a loss for the studies of ceramography, in which he had already made proof of rare competence.(Un lecythe inedit du musee du Louvre, in Revue arch. 1898.p.213-234).

We have already cited and reproduced the vase of this kind, that is said to be made of Corinthian clay, which is known by the name of the Macmillan lecythe (Figs. 270,271); but from all traces of Ionism that we have found there, we believe that it could be related to the works of advanced Ionian ceramics.

On the contrary, there is no reason to dispute with Corinthian manufacture the merit of having produced a pretty lecythe of the museum of Berlin, that we are assured was found at Corinth (Fig. 359).[2] The abundance of rosettes scattered over the field is further an indication of Corinthian origin. The decoration of this lecythe was executed with very minute care by a very skilful workman, who held to leave no surface of the vase without ornament. On the flat border of the mouth, entirely around the orifice of the neck, he placed two encaustic bands of little leaves (Fig. 361), and on the shoulder is an interlacing of lotus flowers and palmatiums connected by cords, whose scrolls and knots are seen (Fig. 362). On the plaque forming the reverse of the handle is a guilloche drawn by him (Fig. 363). On the body is represented Hercules pursuing with his arrows a troop of centaurs that flee before him (Fig. 360). Beneath this painting are two superposed bands. On one are ornaments in the form of sigmas, on the other being radiating leaves starting from the foot. With its interlacings and lotus flowers, the ornament is verw elegant. One can cite as a work of the same kind the lecythe found at Gela. On the body are four pairs of warriors, each of which represents one of those duels, that are favorite subjects of this painting. The figures are 0.8 in. high and are drawn with the dry point with singular clarity. There remains scarcely more than this line sketch. The color has almost completely disappeared.[1]

Note 2.p.648. Furtwängler. Kentaurenkampf und Löwenjagd auf zwei Lekythen.(Arch.Zeit.188 . p.154-182. Pl. X).

Note 1.p.649. P. Orsi. Gela. Fig. 116.

Rather a work of sculpture is the curious vase of the Louvre, which represents a satyr holding before him and clasping it in both arms, as if he sought to lift it to drink fully, a great cratera of the form of an amphora with little columns (Fig.170).[2] It was found in Boetia; but the clay of yellowish white tending to greenish is the same as that of the plaques of Pendeskoupia, and the polychromy is in three tones, black that has turned yellow, violed red and white, that of Corinthian ceramics, This ceramics affers examples of all the ornaments found here, of the guilloche extending around the base, the leaves that surround the foot of the vase, the spirals and chessboard pattern outlining the borders. On the body of the cratera is a band of

little riders, each of which leads a second horse; now there is one of the motives that the painters of Corinth have most frequently repeated. On the reverse and against the belly of the satyr is perceived on the vase the remains of a motive now mostly vanished, but where is recognized the group of two lions rising against each other, the heraldic group whose idea dates back to the celebrated gate of Mycenae. This same subject is shown beneath the handle of a Corinthian cratera of the Louvre.[1] As for the same type of the satyr with his long hair, h his round stomach and the violence of his sensual joy, we have seen what place the Corinthian artists loved to give it in the decoration of their crateras.

Note 2.p.649. Pottier. Le satyre buveur, etc. (Bull. Corr.H Hell. 1896. p.224-235, pl. XIX, XX).

Note 1.p.6 0. Louvre. Hall E.628.

At the same time that it pleases the eye by the originality of its composition, this piece was a trick, a surprise vase. A very simple mechanism was based on the action of atmospheric pressure, and caused the wine poured into the cratera to rise and partly disappear in the body of the satyr, as soon as were raised the two fingers till then placed on the two vent holes arranged on the head and back of the figure.[2] The satyr thus seemed to absorb in a mouthful this liquid, by which he never appeared satiated. This little trick was easily practised, and must divert the guests at a repast. The workshops of Corinth then supplied all Greece with objects of luxury, rich tapestries, furniture with overlays and inlays of metal and of ivory, mirrors ornamented by reliefs and line engravings. A Beotian passing through the industrious city could purchase and carry away as a souvenir this trick vase, which he held sufficient to have his name Pholodon engraved on the right arm of the satyr.[1]

Note 2.p.650. See p. 318 above and Fig. 3 of Pottier's Article with its accompauying explanation.

Note 1.p.651. The letters of this inscription do not belong to the Corinthian alphabet.

From Corinth also came the richly ornamented box, on the body being a band of animals and on the shoulder a scene representing a festal procession; but what makes its originality is, t that the body is connected with the border of the orifice by

three female busts in the round (Fig. 318).[2]

Note 2.p.651. On these vases in form of a figureine, two of which are assured to have been found at Corinth, also see:--

Collection E. Piot. Antiquities. 1890. Nos. 109,112, 113.

Willisch, p. 104, cites some other examples of these vases with reliefs. Others have been found represented in Am. Jour. Arch. 1906, p. 420. I find there the following types:- the owl, the helmeted head, the drinking satyr, the woman's head and t the ram.

The examples cited above suffice to prove that the potters of Corinth to excite the curiosity of their patrons, sometimes offered them very careful specimens of those mixed works, that belong both to the statuette and to the vases properly so called; but then did not appear to have frequently practised this sort of work, that had been done and will be done by other ceramists, for example those of Cyprus and of Athens. There exist no rhythons on which is recognized the mark of Corinthian fabrication. In any case, when they attempted anything of this k kind, they have applied to it a certainty of hand and of fancy shown by the image of the drinking satyr. This mastery cannot surprise us. Was it not to the Corinthians that tradition attributed the merit of having invented the art of modeling moist clay, of making from it reliefs that should preserve the memory of the traits of a loved person, and those which ornamented the frontal tiles of the ridges of temples? [3]

Note 3.p.651. Pliny. H. N. XXXV. 151.

In studying the origins of Corinthian ceramics, we have stated how much the influence of oriental models had made its impression on its most ancient works; but among the mot ves of ornament and the themes, whose use characterizes the products of this industry, we have not found anything to mention, which appears to have suggested to the Corinthian decorator by the relations that he had maintained with Egypt and by the admiration inspired in him by its monuments. Doubtless the sphynx o often appears in files of animals and of demons unrolled on the sides of the first vases; but when he uses this type, the sphynx had long sinci lost its nationality. More or less transformed, it had entered into the current repertory of the artists of Asia. It was the same with the lotus of the Egyptian m marsh, with its leaf, its buds and flowers. Nothing is found

here that seems to have been the object of the direct borrowing from Egypt. By one of these borrowings we have explained one of the ordinary procedures of Ionian painters, the habit that they had of distinguishing by a lighter color the flesh of women from that of men, after the example of the Egyptian painters. It is very rare that the Corinthian painters thus mark t this difference. We have not to mention a single Corinthian vase, which like the hydria on which is represented the murder of Busiris, like the cup on which appear Arcesilas and the nymph Kyrene, offer to the spectator the vision of Africa, of its various ethnic types, and its local fauna and flora. The negroes that the Ionian painter liked to show with their wooly hair and flat noses, scarcely show themselves in Corinthian p paintings. Orient that inspired the author of these paintings is what may be called the common Orient, the composite repertory that the artists of Tyre and Sidon themselves created for the needs of their industry by mixing indifferently motives t taken from Egypt and from Chaldea; it is what Phoenician wares distributed and made common among the coastal peoples of the Mediteranean. To supply the needs of their own luxury and to respond to those of their patrons, the Corinthians remained in relations with the Phoenicians, the first founders of their c city; but they had left to the Ionians the monopoly of the commerce of Egypt; they had no agencies at the mouth of the Delta. Their ships sailed to the Adriatic, the strait of Sicily and the Tyrrhenian sea; the great purchasers of their painted pottery were the Italians, particularly the Etruscans.

We do not believe that any vase with scenes with figures can be earlier than the last years of the 7 th century, and it was in the course of the 6 th century that most have been made. T They bear the mark of the taste of the time, when further Corinth owed to the talents of Cypselos and of Periander the privilege of occupying in Greece an uncommon position. Under these two princes (629-585), it attained its highest degree of political power and of commercial expansion; it was then that its manufacturers, assured of finding advantageous places for the most careful and costly pieces that they could execute, m must have made the final efforts to surpass themselves and to give their final limit.

Such facts are reported by historians or stated by archaeol-

archaeologists, that indirectly confirm the proposed date by the relation established between the reign of those princes a and certain monuments of Corinthian ceramics. It has been stated how by the choice of the theme, the arrangement of the persons and the names given them, some of these paintings almost seem to be copies of the reliefs which decorated the famous coffer of Cypselos! [1] Now under Cypselos or at latest under P Periander they carved to be consecrated at Olympia the luxurious chest, that must recall to all Greeks the adventure of the founder of the dynasty, miraculously preserved from death by the protection of the gods. Have we not also seen what place was held in the repertory of the Corinthian painter by the scenes borrowed from the Bacchic myths and those representing bacchanals? [2] We know from Herodotus that periander had called to his court the poet musician Arion of Lesbos and that he retained him there a long time.[3] At Corinth he created the dithyramb, a sort of oratorio executed by a great orchestra. Is it not r right to suppose that the splendor of the festivals thus celebrated by the prince in honor of Bacchus must contribute much to place in fashion these Bacchic themes, to suggest to painters the idea of repeating them on many of their vases?

Note 1.p.653. See p. 638 above.

Note 2.p.653. Also see p. 643-644.

Note 3.p.653. Herodotus. I, 23-24.

After the fall of Cypselos occurred internal crises that compromised the authority of Corinth over its colonies, and aided Corcyra, the most important of them to conquer full independence; but Corinthian industrn was then too well launched, it p possessed patrons too much attached to its habits for these a agitations to risk making a serious attack on its activity, t the more because the events of which Asian Greece was then the theatre delivered it from formidable competition, that of the Ionian potters. The Persians had conquered Ionia, Phocea, that one of the Ionian cities which had carried on the most prosperous commerce with the West, had been abandoned by its inhabitants. In these conditions, if the share of Ionian vases on the markets of Italy had not entirely ceased after 550, it must h have sensibly diminished. The place remained free for Corinthian manufacture.

There was indeed Athens, where in the last quarter of the c century the art of the ceramist, profiting by the models offered to it under the Pisistratides by historical sculpture and painting, made rapid progress and created a new type, that of vases with red figures; but Athens then had neither a war nor peace navy. It then had at its disposal only a beach for landing, that of Phalerum. If the vases oh its potters then began to be appreciated in Etruria, it must be by the intermediary of the privateers of corinth that they came there, and while these derived fine profits from the role of middleman, they must always reserve in their cargos the greater place for the product of their own workshops. Until about the year 500, the competition of Attic manufacturers had not hurt or troubled them. What proves this are the friendly feelings which they maintained toward Athens. about 505 then lent aid by their triremes in the war sustained against Egina, and they opposed the project conceived by Sparta of forming against Athens a league of the entire Peloponessus. In ten years between the first and second Median wars is the change of views. Miltiades, Aristides and Themistocles endowed Athens with a magnificent port of Piraeus and a war fleet. This fleet triumphed at Salamis and at Mycale, while the Athenian hoplites beat the Persians at Mycale. As always happens in such a case, the industrial and commercial flight follows the victories of the sailors and soldiers. Under the protection of the squadrons leaving Pireeus, merchant vessels depart in all directions to carry everywhere the products of the workshops of Athens, recommended by the prestige enjoyed by the city, that seems called to reign over the Greek world, sought for the bold and novel taste whose imprint they bear. Corinth has lost the game on that ground. Its manufacturers are discouraged; they did not attempt to struggle. The check thus suffered and the impoverishment resulting from it explain the hatred that Corinthians show toward Athens during the entire course of the 5 th century. They are the soul of all the plots hatched against its increasing power; they excite and p push against them Sparta, always undecided and slow to undertake, and at Corinth was held the congress in which iwas decided that so-called war of the Peloponessus, which must darken the fate of Athens.

According to what we know thus of the relations of Athens

[illegible]
[illegible]
[illegible]
onciliable enemies of Athens. The study of the Vases confirms
[illegible]
itself when there sounded in the 5 th century the hour of deci-
sive advance; it could not follow the movement by which the ma-
jor arts then go on to transmute into perfect forms the highest
[illegible]
not had the useful and necessary stimulation then received by
the humblest artisans, when they saw created under their eyes
the work of the masters of sculpture and of painting. It was
then obliged by practices that had turned to routine. When at
Athens at about the end of the 6 th century red figures began
to be substituted for black ones on the painted vases, the Cor-
[illegible]
the processes of that novel technique. There is not a single
[illegible]
Corinthian, or to which one could be tempted to attribute a
Corinthian origin because of its form, arrangement of the deco-
ration or choice of motive.[1] There have been found at Corin-
th many vases with red figures; but all by their style and by
the inscriptions read on them announce an Attic origin; there
are even some that are signed by Athenian masters.[2] At Athens
were placed in the 5 th century their orders by the Corinthians,
who desired to ornament their dwellings by vases decorated in
the fashion of the day. All the vases on which one descends to
[illegible]
figures on a light ground; all bear the mark more or less accu-
sent of the conventions and awkwardness of archaism.

*Note 1.p.605. We know not just when at Corinth and in its c
olonies was renounced what we have termed the Corinthian alph-
abet by the use of the characters which distinguish it. Always
from the first half of the 5 th century at Syracuse as at Cor-
inth, there was employed in official documents an alphabet pre-
[illegible]
bet. This is shown for Syracuse by the dedication of a bronze
[illegible]
(Roehl, Inscr. gr. ant. 18); and for Corinth by the remains of
[illegible]*

and Corinth, it would be in the course of the 30 or 40 first years of the 5 th century that the Athenians supplanted among foreigners the Corinthians,declared themselves then the irreconcilable enemies of Athens. The study of the Vases confirms the inferences derived from history. Corinthian could not renew itself when there sounded in the 5 th century the hour of decisive advance; it could not follow the movement by which the major arts then go on to translate into perfect forms the highest conceptions of Greek thought. To place itself in line, it had not had the useful and necessary stimulation then received by the humblest artisans, when they saw created under their eyes the work of the masters of sculpture and of painting. It was then delayed by practices that had turned to routine. When at Athens at about the end of the 6 th century red figures began to be substituted for black ones on the painted vases, the potters of Corinth did not make the effort to become initiated in the processes of that novel technics. There is not a single vase with red figures which bears inscriptions in Corinthian characters, or to which one could be tempted to attribute a Corinthian origin because of its form, arrangement of the decoration or choice of motives.[1] There have been found at Corinth many vases with red figures; but all by their style and by the inscriptions read on them announce an Attic origin; there are even some that are signed by Athenian makers,[2] At Athens were placed in the 5 th century their orders by the Corinthians, who desored to ornament their dwellings by vases decorated in the fashion of the day. All the vases on which one depends to recognize works coming from the workshops of Corinth have dark figures on a light ground; all bear the mark more or less apparent of the conventions and awkwardness of archaism.

Note 1.p.655. We know not just when at Corinth and in its c colonies was renounced what we have termed the Corinthian alphabet by the use of the characters which distinguish it. Always from the first half of the 5 th century at Syracuse as at Corinth, there was employed in official documents an alphabet presenting no singularity, that was derived from the Ionian alphabet. This is shown for Syracuse by the dedication of a bronze helmet by Hiero after his victory over the Etruscans in 474; (Röhl, Inscr. gr. ant. 16); and for Corinth by the remains of the inscription which he placed at Olympia after the victory

obtained over Athens in 457. (Böhl. Add. 26, a).
Note 2.p.655. Willisch. p. 153.
In these conditions, it is easy to divine how matters occurred. Sleepy by the long duration of their success, confidning in the high prices reached by their merchandise, the potters of Corinth did not remain in the current. They had not taken the trouble to change in time their equipment, patterns and modes of decoration. They were surprised by the suddenness of the revolution in taste among their habitual patrons, when Athenian ships brought to Sicilians and Italiotss the vases of Euphronios, Erygos and Douris. Badly prepared for the contest, they did not attempt to sustain it. The models out of fashion which they obstinately offered found no purchasers. Then they resigned themselves to use no longer their excellent clay, except for making common pottery, that had only restricted markets. From day to dan this was the decadence of the entire industry; but this could not fail to leave in the hearts of the citizens of Corinth bitter resentment against the rivals, who were the authors of that sudden ruin.
Everything then gives reason to think that the fabrication of painted vases must have ceased at Corinth between 480 and 460, at the time when the Attic ceramists produced their most beautiful works. Perhaps after that date, in certain workshops previously founded in Etruria by emigrants from the mother country, the tradition of Corinthian decoration still continued for some years, obscured and altered by the influence of the provincial locality for which those workmen labored; but this was merely the resultless prolongation of an art movement, which had already reached its end. This reign was closed when there commenced that of Athens, to extend that splendor for nearly two centuries.
5. General Characteristics of Corinthian Ceramics.
We have caused to pass under the eyes of the reader the principal varieties of Corinthian ceramics. If at the end of this study, the historian attempts to define the impression that he has retained, here is what appears to result from the examination to which have been subjected the products of this fabrication of those of the branches which it founded in Italian lands.
What particularly charactizes this ceramics is this prodigious fertility, placed at the service of the export commerce,

which dureng at least two centuries knew not the hour of slackening. From its beginnings at had only one care, to supply dealers in perfumes thousands of the vases in forms suited to t their purpose, and that by their singular decoration attest their origin and attract the eye of the purchaser. Gradually as progress the major arts that inspire them, they seek more elegance of forms anf of ornament; they preoccupy themselves with diversifying and animating the decoration by composing images in which are revived all those charming myths of epic poebry, which then enchanted the Greek spirit and also excited the curiosity of the barbarians more or less tinged by Hellenism. Yet even then, when its technics is wisest, it still feels the effects of this entirely industrial origin. It has produced too much to have usually carried into its creations, even those where it appeared most earnest, this scrupulous care of the details of this feeling care of the beautiful, which without eveyn leaviyg the archaic age, make of certain Ionian vases and of numerous Attic vases works of art perfect in their kind. T These qualities of close execution and of spirited refinement are scarcely found except in some of those little vases concerning which we have pronounced the name of miniatures (Fig. 359). On great pieces, the design of the ornament is often a little lax; that of the figures almost always lacks accent.

The vivid intelligence and the passionate love of the beauties of the liying form cause the superiority of Athenian ceramics. Thus for all this study will not require its effects from the variety of colors, it is exceptional that it will seek there the charm for two categories of vases, which io the entirety of its tital production play but a secondary part, for the funerary lecythes and the cups with white ground. In the rest of its creations, it will content itself with the monochrome painting at first black on a red ground, then red on a black ground. Entirely on the contrary, the Corinthian painters are always pleased by diversity of tones. Much before the time when they could begin to transcribe in the paintings of their crateras all or a part of the compositions offered to their eyes in the frescos of Peloponessian masters, they were inspired by oriental tapestries and their work always felt the influence that these exotic models had exerted on their taste. Their decoration is polychrome. On the vases of the last period it com-

comprises three tones, black or brown, violet and white. Among all Greek ceramics, this is then one of the most colored, one of those whose appearance will surprise the eye least, that until then was arrested inly by the ceramics of the extreme Orient or by our modern western ceramics. It has not that gayety which gives to certain vases of Rhodes and of Naucratis those grounds of creamy white on which are detached without hardness the black figures and the pale red of the retouches, which outline the details.

The ceramics of Corinth then cannot rival the ceramics of A Athens in nobility and fineness of drawing, nor those of Ionia for the charm of polychromy; but it has no less ithe interest and the importance that justify the attention which we have a accorded to it. By the extreme diffusion of its products, it increased the pupularity of the painted Greek vases and procured new markets for it. While the Ionians on the coasts frequented by them do not appear to have succeeded in extending the use of these vases among the barbarians with which they traded, among the Egyptians, Phoenicians, Lydians, Thracians, the coastal tribes of the Euxine, the Corinthians knew how to secure purchasers of their merchandise among the Phoenicians of the West, the Carthaginians; but it was especially to the Etruscans on both slopes of the Apenniner that then gave a taste for this pottery. In Tuscany was such an infatuation for there vases, that todan they are found in greater numbers and of more beautiful quality in the Italian tombs than in the cemeteries of Corinth and of the adjacent provinces. To place those products of their kilns, Corinthian manufacturers made very great profits; but what elevates their role is that then did not labor alone for themselves. In accustoming foreigners no longer to know how to do without the luxury of these vases, they opened the way to the Ionian ceramists and then to those of Athens, who disputed with them the favor of these opulent patrons. They thus prepared for themselves competitors, who ended by driving them from the markets which they were first to open. The affair terminated badly for them; but the initiative which they had taken had turned to the benefit of Greek genius and favored its expansion. The master artisans of Athens perhaps would not have carried so far the care in execution, if they had not had the certainty of finding a buyer overseas for the most perfect

the most perfect productions [illegible]

[illegible]

[illegible] potters and the most famous painters.

If the Corinthian ceramists, when they extended the field on [illegible] present and future rivals, had made only useful works, they would have devoted the progress of their art in a more direct [illegible] to give them the honor. They created and accredited new types, such as the alabaster and aryballis, so very appropriate for the use for which they were intended, such as the cotyliske, the lecythe with its very elegant curvature, certain varieties of the pyxis, [illegible] craters with little columns that is a sort of sketch of certain forms to which other workshops will later [illegible] decoration, with various procedures that can serve to vary the appearance and fix the sense. If the Corinthian ceramists were not the first to practice incised lines, one cannot doubt that they gave the example for making these incised lines assist the effect of the painting. Elsewhere men hastened to follow this example. The Attic ceramists of the 6 th century learned to handle the dry point, and the 6 th and 5 th centuries used it with sure mastery in the most beautiful of their paintings.

Another innovation was no less successful. It seems that the Corinthian painter was the first to take up the habit of adding to his figures inscriptions to define them. On the vases of the Rhodian style no legends, nor are they any more on even the most careful of the vases that represent the production of Ionian workshops, before these had commenced to work for export to the west. At Camiros we have found but one, and also it is found on a plate whose Ionian origin is contested. On the contrary at Corinth, as soon as they began to place on vases those [illegible] appear the explanatory legends, both as the means of information and as the element of decoration. These legends were the equivalent of the titles which are now placed at the bottom of our engravings. In every country and at all times, what has always interested and will always interest the mass of the public in a painting is less the talent of the painter, t

the most perfect and costly of their vases, created in the workshops of the Ceramicos by the combined efforts of the most skilful potters and the most famous painters.

If the Corinthian ceramists, when they extended the field on which besides their own activity was exerted those of their p present and future rivals, had made truly useful works, they would have favored the progress of their art in a more direct and more efficient way by many inventions, of which it is just to give them the honor. They created and accredited new types, such as the alabaster and aryballa, so very appropriate for t the use for which they were intended, such as the cotyliske l lecythe with its very elegant curvature, certain varieties of the pyxis, tehe cratera with little columnu that is a sort of sketch of certain forms to which other workshops will later give amplitude and singular nobility. It is the same with the decoration, with various procedures that can serve to vary the appearance and fix the sense. If the Corinthian ceramists were not the first to practice incised lines, one cannot doubt that they gave the example for makink these incised lines assist t the effect of the painting. Elsewhere men hastened to follow this example. The Attic ceramists of the 6 th century learned to handle the dry point, and the 6 th and 5 th centuries used it with sure mastery in the most beautiful op their paintings.

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then the subject that he has treated. Attic potters were too intelligent not to understand the advantages of these advances made for the curiosity of the patron. The sale could only increase by them.

Finally, although these questions of chronology may be difficult to solve, it is possible that ceramists of Corinth may n have been the first to think of seeking in the epic myths the ordinary themes of their decoration, those themes whose interpretation was facilitated by the addition of the legends. The idea of taking this method had been suggested to them by the sight of the works of those Corinthian and Sicyonian artists to whom Pliny gives so large a part in his history of the birth and first progress of monumental painting. Given the place then held in the life of Greek society by this narrative poetry, with the infinite variety of tales which it labored to multiply, all that imagery on clay, placed by the low cost of the material and the intensity of production in the reach of all purses, could not fail to be much appreciated anf sought for, as soon as it appeared on the markets of Greece and those outside it. The vogue soon enjoyed by the vases thus illustrated was perhaps what decided the Ionian potters of Cyrene and the unknown authors of the so-called hydrias of Caere, as well as the Athenian potters contemporaneous with Pisistratus promptly to adopt this kind of decoration. Their patrons had all felt since they had possessed the taste for the representation of all those adventures of gods and heros, and risked scorning the vases on which the brush was contented to trace lines and forms, that only aimed to please the eye without recalling to memory the episodes of the favorite personages of the familiar stories.

The industry, or betteer said, the art of the painted vase had then made decided advances at Corinth. Is it not by the s secret and obscure perception of the services so rendered, that one can give reason for another novelty, those signatures of artists of which Corinthian ceramics has given us at least two examples? We have not found a single one in the entire series of vases that we have attributed to Ionian workshops, even in the series appearing most recent. There is indeed one very ancient vase of unknown origin, which from the character of this

attribution has been compared to vases of Melos, that i[s] attribute to Argos and which is perhaps Attic, on which I read Aristophanes epoiese, a term that can only mean the workshop from which the vase came; but this is indeed the quality of painters claimed by the Corinthians Timonides or Chares in the use of the verb egrapse. The first as if better to call n himself to attention even takes care to add to his own name that of his father Bias. There is an indication which has its value. If all painters of vases did not sign their works, at least some would claim that right. Their situation tended to become elevated. They were not always satisfied in doing the anonymous collaborators of the manufacturers. Since they could thus do honor to their work, artists of talent would be more disposed to engage in that work. This is evidenced by the numerous [illegible] ers. There certain vases dating from the first half of the 5 th century even in that respect have suggested the conjecture that possesses a certain peculiarity. The processes of fabrication there differ in some respects from those usually employed by ceramic painters; in studying them very closely it is perceived can be recognised the hand and execution of artists who had been accustomed rather to practice fresco than to decorate clay.[1] Tempted by the attraction of a very large salary and by the pleasure of trying themselves in a new kind of work, these artists, historical painters as we would say, on the occasion had agreed to lend their assistance to some famous potter for the execution of vases of exceptional importance.

1. [illegible] Pottier, p. [illegible]

Corinthian industry has always merited well from Greek art by its activity always awake, by its sustained endeavor to perfect its equipment, by the routes which it has opened to commerce in painted vases and by the examples it has given; but it has been only a workman from the first hour. Like the precocious child whose youth deceives the hopes that their infancy had given, it relaxed its efforts in full career; it suffered what naturalists term an arrest of development. If one follows [illegible] the change of season is arrested in a triangle [illegible] space over our heads, we see nearly equal intervals that the

fabrication has been compared to vases of Melos, that others attribute to Argos and which is perhaps Attic, on which is read Aristonophos epoise, a term that can only mean the workshop from which the vase came; but this is indeed the quality of painters claimed by the Corinthians Timonidas of Chares in the use of the verb egraphe. The first as if better to call h himself to attention even takes care to add to his own name that of his father Bias. There is an indication which has its value. If all painters of vases did not sign their works, at least some would claim that right. Their situation tended to become elevated. They were not always satisfied in being the anonymous collaborators of any manufacturer. When they could thus do honor to their work, artists of talent would be more disposed to engage in that work. This is evidenced by the numerous signatures of painters furnished by the ceramics of Athens. There certain vases dating from the first half of the 5 th century even in that respect have suggested the conjecture that presents a certain probability. The processes of fabrication there differ in some respects from those usually employed by ceramic painters; in studying them very closely it is believed can be recognized the hand and execution of artists who h had been accustomed rather to practice fresco than to decorate clay.[1] Tempted by the arrticatio nf a very large salary and by the pleasure of trying themselves in a new kind of work, these artists, historical painters ar we should say, on the occasion had agreed to lend their assistance to some famous potter for the execution of vases of exceptional importance.

Note 1.p.661. Furtwängler and Reichhold. Griechische Vasenmalerei. 1 st series, p. 72, Pl. XV.

Corinthian industry has always merited well from Greek art by its activity always awake, by its sustained endeavor to perfect its equipment, by the routes which it has opened to commerce in painted vases and by the examples it has given; but it has been only a workman from the first hour. Like too precocious minds whose youth deceives the hopes that their infancy had given, it relaxed its efforts in full career; it suffered what naturalists term an arrest of development. If one follows with the eye one of those bands of migratory birds, which at the change of season is arranged in a triangle and traverses space over our heads, he sees nearly equal intervals that the

singular movement has produced. From time to time a bird detaches itself from the rear guard and takes the head of the column to assume in its turn the task of conquering the resistance of the air and of leading the flight to the distant aim of its desire and its dash. Thus affairs passed in Greece and this explains the long duration of the evolution of Greek genius, its fertility so many times secular and the prodigious variety of its production reneved without ceasing. There also various groups succeeded each other in the task and in honor of forming the advanced guard, of pointing out and preparing the way, of guiding the march to the star. After these Achaians which were scarcely seen in the prehistoric gloom, was that brilliant pleiad of Ionian and Eolian cities, which in the domain of plastic as well as in that of letters, had commenced and urged everything. Beside them and after them, when the hands of the Persians had beaten down and weighed heavily on Ionia, Corinth, whose enterprising and industrial mastery completed the conquest for Hellenism of the barbaric West. Corinth by the progress that it made in the trade of the work in clay and bronze as in that of fabrics of luxury, prepares and assumes in the approaching future the successes of grand art. This conquering art which plays with the material and bends it to the role of the docile interpreter of all its thoughts, it is Athens that will personify it and realize by its ambitions, until the day when in Greece immeasurably aggrandized by the force of Alexander and by the foundation of the Macedonian kingdoms of Asia and Africa, it will become a simple provincial city, a university city; b but then will come to replace it in that function of director and imitator, creator of ideas and of new forms, other cities, some entirely new like Alexandria, others like Pergamon being suddenly elevated to the dignity of capitals. In this Orient that it has transformed, which will bear witness to the living force that it still retains after so many revivals, the soul of the Hellenic race, this will be the part which it will take, a considerable or rather preponderant part, in the elaboration of Christian dogma, whose triumph will close the era of antique civilization. This brief summary of the most beautiful of histories, that it appears there, were it only in the second plane, between that of the Ionian cities and that of Athens.

6. Other Peloponessian Vases. Argos. Sicyon. Egina.

We have stated what the development of the industry of painted vases had commanced to take at Corinth under the last Bacchiades, and what progress it had realized there, what importance it had retained until the end of the 6 th century and even perhaps a little later. The industry of the painted vase a aided to make Corinth illustrious and became one of the princIpal sources of its prosperity. It seems that this industry multiplied its products there and so numerous are the points in which these are found in the trenches, that Corinth was in the course of the archaic age the sole city of the Peloponessus in which men knew how to give the clay vase the form and decoration, which could make a work if art. There was certainly the an illusion. Doubtless there were not then in the peninsula workshops that could rival Corinth; but it is truly not admissible that in the country in which the smallest city, lost in the mountains, as one finds in reading Pausanias, its public edifices decorated by paintings and sculptures, that outside Corinth the ceramists did not know how to fashion anything but a monochrome and coarse pottery, only destined for the uses of domestic life. There must have been many local workshops to serve the needs of a restricted patronage, and men attempted to decorate clay by copying more or less skilfully the types of painted vases, that the great cities of industrial art had created and made the fashion; but what these workshops could produce in Elis, Arcady, Achaia, and Messenia, we do not even suspect. By what models was the artisan inspired there? What ictivity has he displayed there? I know no indication which permits a reply to these questions by hypotheses more or less specious. It was only yesterday that we knew the Laconian workshop.[1]

Note 1.p.663. Histoire de l'Art. Vol.IX. p.506-508.

It was not entirely the same for Sicyon and Argos, whose part in the art movement of the Peloponessian schools was even more important than that of Corinth. The territories of the two cities are contiguous to that of Corinth. When Pliny sketches the history of the commencement of painting, he divides the honor of first progress accomplished and of the first works of the brush worthy of memory between Sicyon and Corinth.[1] Butades,

who passed as having invented the procedures of modeling in clay, was a Sicyonian established at Corinth.[2] The relations of Argos with Corinth could not have been less close. Particularly statuary made the glory of Argos; the founders of Corinth borrowed from the Argive sculptors the types which they made common in the figures with which they ornamented the luxurious furniture and the wrought mirross that they distributed in all Greec.

Note 1.p.664. Pliny. H. N. XXXV. 15-16.

Note 2.p.664. The same. H. N. XXXV. 151.

An observation made by an epigraphist permits one to suppose that Sicyon under tits Orthagorides princes, then very flourishing, had ceramists that worked in the same taste as their n neighbors of Corinth, and lannched on the Italian market vases that have been taken till now for products of Corinthian shops.[3]

At Olympia on many stones which entered into the construction of the treasury of Sicyon,[4] have been found workmen's marks m made of some letters. Now in those marks that appear to be most ancient is found the epsilon represented by the character X. This is not found in the Corinthian alphabet, which gives to the same letter the form B. This sign X would then be there as the mark of the Sicyonian potter. Now on theccratera found at Caere and on which is represented the combat of Achilles and Memnon, in the names of the two heros inscribed on the clay, the epsilon has the form proper to Sicyon.[5] This same letter is found again at the Heraeum of Argos on a fragment of a vase.[6] These is no reason for surprise, that in a city where the painting of history was cultivated by famous artists, that there had been skilful painters of vases. The matter further has only a very secondary importance. The vases in question are distinguished neither by the themes nor by the execution of the decoration of those which are certainly of Corinthian origin. The Workshops of Sicyon must have been only branches of Corinthian workshops.

Note 3.p.664. Purgold. Inschriften aus Olympia. p.174-179. (Arch. Zeit. 1881. p. 169-195.

Note 4.p.664. Histoire de l'Art. Vol. VII,p.381, 411.

Note 5.p.664. Furtwängler. Beschreibung der Vasensammlung im Antiquarium, No. 1147. This vase was published in Mon. de l'Inst. arch. Vola II, pl. 38 B; described in Annali. 1836.p.310. On

On the Sicyonian alphabet, see Kretschmer. Die griechische Vasen inschriften etc. Sect. 35. The character in question also appears among the few letters of a mutilated inscription traced with a brush on a fragment of the neck of a pithos at Thermon in Etolia (Practika,Soc. arch. of Athens. 1899.p.61).

Note 6.p.664. The Argive Heraeum. Vol. II, p. 185, Fig. 101.

The case is a little different for Argos. The only painted vase on which has been mentioned the form of letter peculiar to Argos is a plate found at Rhodes; it resembles too much in all points the other vases from the sage cemetery, its style is too frankly Ionian, that one could dream of seeing in it a product of some workshop overseas.[1] When Argos sent colonists to Rhodes, they perhaps made use of the Argive alphabet for a certain time, or indeed that legend was placed there by some workman of Argive origin, who then found himself working in Ionia.

Note 1.p.665. Histoire de l'Art.Vol. IX. p. 433, Fig.221.

However it is certain that the industry of the ceramist for several centuries occupied many men in Argolis, who knew how to prepare clay there with great care and to decorate it with taste. Proof of this has been made by the excavations of the Heraeum of Argos.[2] By thousands were taken from the trenches fragments of vases, most of which bore traces of painting.[3] This accumulation of rubbish is explained by a custom already made known by the excavations of Naucratis. If the rich consecrated to the deity in the sanctuaries steles or statues, the figure of terra cotta or vase of clay was the offering of the poor.[4] Unfortunately the ground of the Heraeum has been disturbed more in the course of time than that of Naucratis, and the stony earth of Argolis is less suited to preserve these fragile objects than the clay of the Delta. There have been found indeed a thousand vases intact or scarcely injured; but these are pieces of very small dimensions, alabasters, aryballas or pyxis. Some sixty others have been restored entirely or in part by the aid of fragments; but it has not beeu possible to restore a single vase of great height. Not a cratera, amphora or hydria; not even an entire cup.

Note 2.p.665. Argive Heraeum, by C. Waldstein with cooperation of G.H.Chase, H. Fletcher de Cou, etc.1902, 1905.

In Vol. II, p. 57-184, is found the Chapter devoted to the

vases by J.C.Hoppin, and that in which are explained the inscriptions of these vases by T.W.Hermance. p.185-187.

Note 3.p.665. Hoppin estimates at 50,000 the number of vases represented by the fragments carried to Athens and contained in hundreds of baskets. But he counts one vase to 4 or 5 fragments. Now according to his own evidence, most of the vases have been reduced to small bits. Many of them might have given 15 or 20 shards. Then the calculation has a defective basis. (Argive Heraeum. Vol. II, p. 61).

Note 4.p.665. On many of these fragments are read inscriptions engraved with the point and conceived thus.(Greek).

When one studies the minutely detailed inventory given of t the vases and fragments found on the site of the Heraeum, it is not without surprise that he sees how rare there the pieces which bear the mark of a foreign workshop. There has not been mentioned a fragment or style of decoration permitting the recognition of a product of any ionian workshop; only some remains of cups recall distantly the make of the cups of Cyrene. At most are only two dozen fragments that it may be possible to refer to vases of Attic origin. Only Corinthian fabrication was represented by a very considerable number of fragments.[1] Corinth was too near Argos that the works of its potters could not extend into the adjacent State. Yet of these the fragments having very clearly this character form only a slight part of the entirety of the pieces numbered in this catalogue. The local industry furnished by far the greatest quantity of the vases which popular piety had heaped in the Heraeum and its dependencies. The faithful purchased them at Argos or in shops e established for that purpose near the temple.

Note 1.p.666. Argive Heraeum. Vol.II, p. 165-173.

By the excavations of Mycenae and of Tiryns, as by those of the Heraeum, it is known how during the entire course of the Mycenean age the industry of painted vases had flourished in Argolis. All those kilns could not be extinguished when the Achaian royalties fell. The same workmen continued to labor f for the people that obeyed Dorian kings, new sovereigns of Armos; but they prepared their clay with less care and adopted the style which prevailed after the Dorian invasion throughout all European Greece, the style termed geometric. The rema-

fragments of this pottery abounded in the trenches. Most of these pieces appeared to come from vases, that in dimensions [illegible] vases of the Dipylon. As at Athens, on many of these pieces, the motives of the decoration only consisted of combinations of lines; but on others are found those figures of men, horses, chariots and aquatic birds, which cover the field on many Attic vases, those appearing most advanced, figures which get as there having the thinness and stiffness entirely schematic. Then at first sight, one can ask if these vases were not made at Athens and imported into Argolis; but it is affirmed that there are sensible differences in material and fabrication be- [illegible] Argolis the paste is coarser and the walls of the vases are t [illegible] concurs in suggesting the hypothesis of a native industry con- [illegible] period. Given the narrowness of its conception and the poverty of its resources, the geometric style does not comprise there from one workshop to another a very marked diversity. That will [illegible] the living form of its infinite variety.

Note 1.p.687. Argive Heraeum. Vol. II, p. 102.

The vases called protocorinthian are still more numerous at the Heraeum than the vases of the geometric style. By their small size they have better escaped the chances of fracture.[2] They have then furnished most of the pieces intact or nearly so. Fragments of this kind also form the bulk of the collection and occupy most space in the plates of the work. The protocorinthian of the Heraeum do not differ from those found at Corinth, Aegina, Syracuse, in Italy and elsewhere. Same forms and decoration. There is reason to admit, that like their congeners they were destined to contain perfumes. Nothing is more natural than the thought of offering fragrant essences to those gods delighted by the odor of sacrifices.

[illegible]

There is no reason to suppose that these vases were made elsewhere than in this Argolis, where from very remote times men

remains of this pottery abounded in the trenches. Most of these pieces appeared to come from vases, that in dimensions and forms were entirely similar to those known under the name of vases of the Dipylon. As at Athens, on many of these pieces, the motives of the decoration only consisted of combinations of lines; but on others are found those figures of men, horses, chariots and aquatic birds, which cover the field on many Attic vases, those appearing most advanced, figures which her as there having the thinness and stiffness entirely schematic. T Then at first sight, one can ask if these vases were not made at Athens and imported into Argolis; but it is affirmed that there are sensible differences in material and fabrication between the vases of this category, whose fragments were collected around the Heraeum, and those taken from Attic tombs. In Argolis the paste is coarser and the walls of the vases are t thinner. The black of the designs is less brilliant.[1] All then concurs in suggesting the hypothesis of a native industry continued there in place, that of the artisans of the preceding period. Given the narrowness of its conception and the poverty of its resources, the geometric style does noh comprise there from one workshop to another a very marked diversity. That will only be produced later, when it will be necessary to interpret the living form of its infinite variety.

Note 1.p.667. Argive Heraeum. Vol. II, p. 102.

The vases called protocorinthian are still more numerous at the Heraeum than the vases of the geometric style. By their small size they have better escaped the chances of fracture.[2] They have then furnished most of the pieces intact or nearly so. Fragments of this kind also form the bulk of the collection and occupy most space in the plates of the work. The protocorinthian of the Heraeum do not differ from those found at Corinth, Egina, Syracuse, in Italy and elsewhere. Same forms and decoration. There is reason to admit, that like their congeners they were destined to contain perfumes. Nothing is more natural than the thought of offering fragrant essences to those gods delighted by the odor of sacrifices.

Note 2.p.667. Argive Heraeum. Vol. II, p.119-120.

There is no reason to suppose that these vases were made elswhere than iu this Argolis, where from very remote times men

had not ceased to work, decorate and fire clay; but it is necessary not to hasten to conclude with surprising assurance , that Argolis inaugurated the manufacture of vases termed protocorinthian. For this name it is desired to substitute another, that of Argive vases.[3] It was not at Corinth but rather at Argos, it is claimed, that the ceramist painter began to renounce the dryness of geometric design, and by the intermediary of motives borrowed from oriental art, he prepared himself to be inspired directly from the human figure as well as by those of animals and plants. None of the reasons alleged for the support of this conjecture seem to us able to justify it or to give it a certain degree of probability. We persist in believing that the term protocorinthian, understood as we have done, is also that best suited to designate the vases in question. Nearly e everywhere and for a century or more, vases of this type abounded on the potter's wheel; but we believe it was at Corinth that the ceramist was stimulated by the requirements of a patronage, which extended from year to year and that it held to retaining, making the effort necessary to extend its style by returning to the grand forms of preceding ages, to those offering fields with an amplitude suited for the introduction of scenes borrowed either from scenes of daily life, or from the tales of the poets and the rich treasure of the myths which they had popularized.

Note 3.p.667. Argive Heraeum. Vol. II,p.161-164, Pl. 67.

The Argive workshops, where there was not the same stimulant, do not seem to have conceived the same ambitions nor realized the same progress. In this enormous mass of fragments that came from the excavations of the Heraeum, vases with figures and mythological subjects cannot be said to be represented. It is most if two or three groups of fragments can be cited, en which it is believed are divined the remains of paintings of that k kind. On the vase which appears to have been a sort of large cup borne on a high base were represented on superposed bands. the combat of warriors around a corpse and the abduction of Dejanira by the centaur Nessos with the pursuit of the monster by Hercules. Elsewhere are some fragments of a great vase on which seems to be represented the chariot race, with the indication of the tripod and the metal basin proposed as the prize of the winners.[1] To judge by the specimens that we are given

of this kind of all this booty, the activity of the workshops of Argos was arrested at the time when they produced vases of the style called oriental Argive by the author of the inventory, of the style that filled its bands with sphynxes, griffins, lions, stags and ibexes, with palmatiums more or less complex. When in centres like Corinth or Athens, art perhaps much more advanced among the potters, whose shops were frequented by visitors to the Heraeum, they continued to make by routine and by the dozen these little vases, which were of easy execution and current sale.

Note 1.p.668. Argive Heraeum. p.164, pl.60, 19 a-h.

However, it is very probable, that in the great city like Argos, there were in the 7 th and 6 th centuries some workshops in which were attempted more elevated tasks. If believing Herodotus, a real customs prohibition then prevented Attic vases from entering Argolis,[1] there were models in the Corinthian vases which found numerous purchasers in Argolis. To some one of these Argive workshops, by conjectures often very specious, are referred many vases to which it is not too well known what origin to assign. More or less slight indications support the possibility of the Argive source.

Note 1.p.669. Herodotus. V. 88.(Greek).

In this list can be placed in the first line the great cup with two handles on which is represented the combat of Hercules against the hydra of Lerne (Fig. 364).[2]

Note 2.p.669. Conze. Drei bemalte Thongefasse aus Argos(Arch. Zeit. 1859. p. 33-37, pl. 125).

It has been desired to place this vase to the credit of Corinthian manufacture;[3] but it is allowable to regard as very d doubtful the justice of this attribution. This vase was found at Argos with two others of the same character but of less interest, and this is an Argive myth which is represented there. As for the technics, it doubtless approaches that of the Corinthian vases, of the more ancient on which the theme of the decoration is taken from mythology. Same pale yellow ground on w which the figures are detached in brown with violet and white retouches on the clothing and accessories. Yet there is a difference. Here are no groups of points, of those rosettes and adventitious ornaments which Corinthian painters scatter in profusion between the persons to fill the field. That is here

free and bare. Two subjects divide it, separated by the handles (Fig. 365). On one side is the combat against the monster by Hercules assisted by his faithful companion Iphites. On the Other is again Hercules followed by Hermes, that in spite of the dog Cerberus has passed the gates of the gloomy abode and goes to disturb Hades. The drawing is awkward and heavy; but in both scenes, the composition is perhaps borrowed from some painting that ornamented the temple of the god and evidences a certain art. There will be noted the care which the artist has taken to vary the movement of the heads of the hydra. Three of these have already been attacked by the sickle that the hero uses in his left hand; they lie inert with drooping tongues. It is further time for Hercules to complete his work of destruction; f for opposite him the body of Iphitos is held in the coils of these serpents, which he vainly tries to repulse and throw off. Two women enclose the group; perhaps it is necessary to see t there repeated and doubled the figure of Athena, the divine p protectress od the son of Alcmena. In what remains of the void space, behind a palmatium with the raised pole and the whip resting against the body, then the two horses detached, one of which nibbles the branches of the tree, while he lowers his h head to a manger. There is a curious care for the picturesque detail, and in the arrangement of the other scene will be found some trace of the same preoccupation to a lesser degree.

Note 1.p.670. Histoire de l'Art. III, Figs. 76,415,416,547.

Here again is another group of vases concerning which has b been spoken the name of Argos on presumptions of a different nature. It concerns pieces collected in the island of Egina, whose inhabitants appear to have derived from outside at least their luxurious pottery.[1] Near the ruins of an edifice believed to have been a temple of Aphrodite were discovered in considerable quantity fragments of painted vases, that have been studied with great care, then classified in chronological order and according to their origin, as far as possible.[2] They were from all times of all workshops, at least from those of Peloponessus and of central Greece. In this mass of shards, w what dominates by far is the protocorinthian, at Egina as at the Heraeum. Here as there were fragments to represent aff the times of evolution, all the phases through which the style had

passed, abstractions of geometric design with ingenious efforts by which the still inexperienced artist attempted to render t the realities of the world of life. On both are the same types, decoration and clay. Now we know that about the time to which is referred the fabrication of these vases, i.e., about the beginning of the 7 th century, Egina was closely united to Argos under the sceptre of Phidon.[3] Conqueror of the Spartiates, Phidon then reigned not only over Argolis, but also over the neighboring islands; he menaced Corinth. At Egina were made those didrachmas, those turtles in which it is agreed to recognize the earliest coins struck in western Greece. In these conditions, was it not from the workshops of Argos that the Eginetans must then have demanded the vases needed by them, and are not all the probabilities for the hypothesis which would give credit to those workshops for nearly all the pottery called proptcorinthian, whose remains have been collected at various points of the island?

Note 1.p.671. This appeared to result for Löschke from the study that he made of vases known to have been gathered at Egina at different times (Athen.Mitt.1897. p. 264). There have been collected at Egina numerous fragments of Naucratic pottery, that cannot be surprising since we know that the Eginetans had an agency at Naucratis. These relations with the Ionian colony of Egypt also explain the presence in the island of some fragments, that appear to come from vases made at Rhodes or at Cyrene.(Furtwängler. Egina. p. 479).

Note 2. p. 671. Pallat. Ein Vasenfund aus Aegina.(Athen. Mitt. 1897. p. 265-333, Pls. VII, VIII, with 42 figs. in text).

Note 3.p.671. On the date of Phidon, see Curtius. Histoire grecque.(Translation of Boucher-Leclerq). Vol. I, pa299, note 3.

On the faith of this hypothesis it has been proposed to attribute an Argive origin to the vase, that by its dimensions and form as by the scene represented on it, seems to no longer belong to the category of protocorinthian. We speak of the great oenochoe with greatly expanded body, which could be restored in great part (Fig. 366).[1] By the subject represented on the shoulder, the painter seems to have desired to recall the adventure of the companions of Ulysses leaving the grotto of the Cyclops, each concealed under the belly of a ram (Fig. 367). The awkwardness of the artist has something amusing. To give

more interest to the image, he has held to show the man's form in its entire length, and for that purpose has given to the fugitives an attitude which they could not have retained for some instants, and that would further have exposed them to be at o once discovered by Polyphemus. He has shown them as entirely detached from the fleece with hands fixed on the horns of the ram, the feet resting on one of the hind legs. Also likewise he badly calculated the use of the space at his disposal. He could only show the forebody if one of the rams. The artist h has well seized there the entirety of the form and the pose of the head. Like the painters of the primitive age, he is quite a skilful handler of animals. This is further not the only trait by which he arouses the memory of his distant predecessors. As it has been noted, the men here have their hair hanging on their shoulders, slender and elongated proportions, the belt around the waist given them on the cups of Vaphio and other monuments of the same kind. It is then the Mycenaean ceramics rather than that of Corinth that is recalled by the decoration of the vase of Egina. On the field here are indeed some rosettes and some groups of points; but these filling motives are here more scattered than on the true vases of Corinth.

At the Heraemu are but very fiw remains nf vases with black figures, of the kind that the Attic workshops produced about the end of the 7 th century and during the course of the 6 th.[1] As for fragments of vases with red figures, they are still more rare.[2] In a general way it may be affirmed that there is no t trace, so to speak, in this deposit, of vases that may be later than the Median wars. The entirely free art of the 5 th century there is only represented by the fragment of a cup with white ground in which is thought to be recognized the style of some pupil of Euphronios.[3] It is possible that the custom of consecrating vases at the Heraeum may have in time fallen into disuse, and that the workshops of Argos, deprived of buyers, then nearly ceased to make painted vases. They worked especially in view of the local sale.

Note 1.p.673. Argive Heraeum. Vol. II, p. 176-178.

Note 2.p.673. The same. p. 178-179.

Note 3.p.673. The same. p. 179, pl. 68.

Egina had been the last patron of Argos, when this with the Temenides held the first rank in Peloponessus; but during the

half century preceding the Median wars, Egina had become a rich and powerful State; its opulent citizens purchased where they pleased the wares for which they had a taste. There were collected several beautiful Attic vases,[4] Later and after 417 Egina was no more than a land subject to Athens, where were provisioned the cleroucques with which the ground had been divided.

Note 4.p.673. Arch.Zeit. 1882. Pl.IX, X, p.197-208. Benndorf. Griechische und Sikilische Vasenbilder. Pl. Lix, I.

From facts which we have collected, it man be concluded that the industry of the painted vase furnished at Argos, at least during the first period of the archaic age; but if we believe that we can point out the products op these Argive workshops, we shall not come to give a definition of the style of this fabrication, that distinguishes those of other Greek workshops. By many indications it is believed, that is divined that certain traditions of Mycenaean art have been more vivacious than in the rest of European Greece. But still, so small is the number of vases with figures to which can be assigned an Argive origin, with all probability, that this is merely a conjecture. What is certain is, that the activity of the workshops of Argos did not end in original creations, and did not turn to exportation. This activity relaxed early, when there increased t that of the workshops of Ionia, Corinth and Athens. Argos had no commercial navy and did not undertake to compete with workshops that disputed with each other the foreign markets. From the time, when to respond to the taste of the day, it was necessary that the brush of ceramic painters should interpret the fictions of epic poetry, the Argive artisans abandoned the contest.

What results from these observations is, that in this book in which the study of the different trades and of the development of their tecnnics has a great place, that cannot pass Argos in silence, when we treat of inventions and creations of ceramics; but if Argive ceramics had a right not to be forgotten in the history of the industry of the Vases, it could claim only a very brief mention. Its progress was arrested too soon, and it had not sufficient originality for one to say that it counts in the history of Hellenic art. In the history of Greek ceramics, Corinthian pottery is alone so far, and according to all appearance except for very unforeseen discover-

discoveries, it will remain alone to represent the efforts and contributions of the artists of Peloponessus.

Additions and Corrections.

p.174. We have forgotten to mention in the course of Chapter XVII the monument that serves as a vignette of the chapter. T This is a little perfume burner(?) in the form of a cup supported by 4 caryatids. Pottier. Vases antiques. A. 396.

p. 190. Note 1. Instead of rikade, read oikade.

p.195, line 7. Instead ofteikeron, read Teichesi.

p.245, third line from the last, Instead of Tomonidas, read Timenidas.

p.254, line 11. Instead of 119, read 114.

p.256, note 1, line 2. Instead of andiphonou, read andiophonou.

p.256, line 28. Instead of 120, read 119; instead of 121, read 120.

p.291. We adhere to say all that we have in this study of ceramics in which we begin in this Chapter to continue it in the succeeding volume, of the beautiful work undertakin and unfortunately left unfinished by the great archaeologist A- Furtwängler. It has for title:- Griechische Vasenmalerei. Auswahl h hervorragender Vasenbilder by Furtwängler und K.Reichhold. Unchangeable phototypes by F. Bruckmann. Great folio. Text in 4to.

The work is divided in series of 60 plates. Commenced in 1900, it now comprises two complete series. A first part of a third series appeared in 10 plates in 1910. After the death of Furtwängler, the direction of the work was entrusted to his pupil and friend F. Hauser. The choice of format which caused a rise in the price of the work to be regretted has permitted the reproduction of all the paintings in their real size. It may be said that these paintings have never been studied with more minute care and been more faithfully reproduced than there by the conscientious and skilful draftsman Reichhold. To each plate is added a double notice. On one the archaeologist explains the subject of the painting and defines its style. In the other his collaborator gives very useful data concerning the technics of the painting. We have made many borrowings from these notices. Those of the archaeologist as far as plate 80 bear the initials of Furtwängler. Then the signature of Hauser alone is read at the bottom of the pages. In the explanations, the latter in the publications that he gives and in the judgments that

aod continues with honor the tradition of his master. Furtwängler was doubtless pressed to hasten to other labors and had further announced the intention of entrusting to Hauser the p preparation of these notices for the rest of the work.

We, have also made use of a book of a different kind:- History of ancient Pottery, Greek, Etruscan and Roman, by H.Ba Walters, based on the work of S. Birch, 2 vols. 1905. The two volumes contain 300 illustrations in black and 8 plates in color. The author has not claimed originality; but attached for years to the department of antiquities of the British Museum and one of the authors of the precious catalogue, which that establishment published of this admirabla collection of vases, he is f fully acquainted with all the literature of the subject, and he has given an excellent summary of the works of the contemporary ceramographs, adding thereto frequent observations suggested to him by the same monuments of which he has charge.

Finally, it is almost useless to state here that our safest guide and most frequently consulted in these researches has b been our colleague and friend, M. E. Potties, conservator of the department of ceramics and oriental antiquities at the museum of the Louvre. There will be found here on almost every page traces of the borrowings from the two works that he has devoted to the collection of which he has the care.

Musee du Louvre. Catalogue des vases antiques de terre cuite. Etudes sur l'histoire de la peinture et du dessin dans l'antiquite. 3 vols in 12. Motteroz.

Part I. Les origines. 1896.

Part 2. L'ecole ionienne. 1899.

Part 3. L'Ecole attigue. 1906.

As may be divined from the subtitle, this catalogue gives m much more than it seems to promise. The paintings of vases being only a reflection of the works of grand art, of painting and of monumental statuary, M. Pottier with regard to the vases sketched there with brilliant ease an entire history of the a arts of design for the period that he includes.

In a way, pieces justifying his ideas and views are presented in the two albums that he published under this title:--

Vases antiques du Louvre. Photoghaphs and drawings of J.Devillard. Hachette.

Series 1. 1897. Halls A and E. Les origines. -- Les styles

primitifs. Écoles Rhodien et Corinthienne. 51 pls.

Series 3. Hall E. Vases de style ionien trouves en Italie. Hal Hall F. Vases attiques a figures noires throves en Italie. Hall G. Vases attiques a figures rouges trouves en Italie. 51 pl.

These albums present types of vases selected in the halls m mentioned above. The text preceding the plates, besides the d detailed description of the vases represented here for the first time, contains that of all others prevìously published, wh- have appeared to M. Potties particulasly worthy of being brought to the attention of visitors to the museum, and for each of these vases the notice refers to a reproduction formerly g given. To facilitate the publication of a great number of types, M. Pottier has nearly always had recourse to the process of f facsimile engraving. As he recoggized himself, this process has one defect, that of the gray appearance of the figures; but he has furnished the means of giving a very accurate facsimile of the forms, ornaments and the subjects represented, while permitting the albums to be delivered at a very moderate price, which permits acquisition by isolated workers, which is not the case f for the collection of Furtwängler and Reichhold, that more than one library will perhaps hesitate to ensure its possession.

We are happy to seize this occasion to thank M. Potties for the courtesy with which he has opened to us and to our draftsmen the glass cases of the galleries of the Louvre, and for the earnestness he has coused us to profit by his conversation in these halls, where we have spent many hours, and by all the r resources of his so accurate erudition and the refinement of his taste. There are many archaeologists that with their entirely bookish science, have no taste or very little .

P. 293. The lecythe that we give as type of vases with black figures (Pl. XVI) is at the Louvre, Hall F, 159. Its height is 8.4 ins. The oenochoe that represents vases with red figures is 8 ins.(Pl. XVII) and is found in hall G, 243.

P. 307. Note 1.Instead of prochoridio, read prochoidio.

P. 314. On the subject of the onos or eginetron, I also cite two Articles, unknown to me until after the printing of this part of my book:-

Xanthoudidis. Epinetron (Athen. Mitt. Vol. 35, p.323-334, 4 figs. in the text), and C. Blinkenberg. Epinetron und Webstuhl Athen.Mitt. Vol. 36, p. 145-153.

[illegible]

... were flocks of crude wool, which the woman extracted from the casket that the painting reproduced by us (Fig. 253) shows placed near her. On this piece, placed on her knee that was inside the half cylinder, she formed and carved in the direction that she locks, she made rolls of it which she attached to the distaff. Cretan women still for this purpose use a portable tile that they place on their knees (Fig. 3 of the article). Blinkenberg admits on the whole the explanation given by Xanthoudidis; he only believes that he could affirm that the use of this utensil was not extended throughout all Greece, that it was peculiar to Attica and Rhodes, whence come all the objects of the kind which have been found. What especially occupies the author in this essay is the trade of weaving with [illegible].

P. 314. Among the secondary forms that I have described, I have neglected to cite the cothon mentioned by Athenaeus (XI, 483). What appeared to characterize the cothon is its flattened form with a lip bent inside like that of those inkstands, where by this means the ink is prevented from running out in case of the fall of the vase. On the subject of this type, see R.M. Burrows and P.N. Ure, Kothons and vases of allied types (Jour. Hell. Studies. Vol. 31, p.72-99). The authors found many of these vases at Rhitsona in Boeotia, and incline to think that they did not all serve for the same uses. Some might have been incense burners; others perhaps were lamps.

P. 319. I was mistaken in attributing to Thera with Förster (Annali. 1869, p.172) and with Rayet (Histoire de la céramique [illegible]) the [illegible] the latter (Fig. 199). After inquiry, Dragendorff believed that he could affirm that this curious vase was not discovered at Thera [illegible].

P. 320. It would seem from certain indications, that the pot- [illegible]

Xanthoudidis demonstrates, according to the spinning of wool transmitted from generation to generation for centuries among the countrywomen in Crete and in the rest of Greece, that the back of the onos served to flatten and smooth the thread, as it was believed. What was placed on that convex and rough surface were locks of crude wool, which the women workers took f from the basket that the painting reproduced by us (Fig. 165) shows placed near her. On this piece, placed on her knee that was inside the half cylinder, she formed and carded in the direction that she looks, she made rolls of it which she attached to the distaff. Cretan women still for this purpose use a portable tile that they place on their knees (Fig. 3 of the Article). Blinkenberg admits on the whole the explanation given by Xanthoididis; he only believes that he could affirm that the use of this utensil was not extended throughout all Greece, that it was peculiar to Attica and Rhodes, whence came all the objects of the kind which have been found. What especially occupies the author in this essay is the trade of weaving with the warp stretched vertically.

P. 316. Among the secondary forms that I have described, I have neglected to cite the cothon mentioned by Atheneus (XI, 480). What appears to characterize the cothon is its flattened form with a lip bent inside like that of those inkstands, where by this means the ink is prevented from running out in case of the fall of the vase. On the subject of this type, see R.N.Burrows and P.N.Use. Kothons and vases of allied types (Jour.Hell. Studies. Vol. 31, p.72-99). The authors found many of these v vases at Ritsona in Beotia, and incline to think that they did not all serve for the same uses. Some might have been incense burners; others perhaps were lamps.

P. 318. We were mistaken in attributing to Thera with Förster (Annali. 1869, p.172) and with Rayet (Histoire de la ceramique grecque, p. 52) the oenochoe with eagle's beak reproduced from the latter (Fig. 168). After inquiry, Löschke believed that he could affirm that this curious vase was not discovered at Thera but at Egina.(Athen.MIii.1897. p. 199-200).

P. 390. It would seem from certain indications, that the potters of Naucratis in the 6 th century may have exported some of these vases which then made. It is believed that there were found at Mycalessos in Beotia fragments of polychrome vases

that cups from Naucratis (Jour.Hell.Studies. Vol. [illegible]. p. 208-2[illegible]3, [illegible]. 83-[illegible]8).

p. 406. Within my knowledge, no excavations have been made on the site of Teos, which is very near that of Clazomenae; but a verse of Alcaeus permits the belief that Teos was one of [illegible] ...

(Athenaeus. XI, p.481,a). He appears to have there an allusion to the game of cottabus. Without stopping to explain it, all that we retain of this fragment is, that in Asian Greece, cups from the workshops of Teos were particularly desired for [illegible]

[illegible]. The author has given for the epigraph of his essay the vase of Alceus just cited. The cups of Chios were also praised. "The cup of Chios," said Hermippos, a comic writer, "hangs on a nail at the top of the wall" in the festal hall. Athenaeus, p.480.

p. 413. We believe that there is reason to attribute to Rhodes and to some Ionian workshop of the 6 th century as proposed, the oenochoe with low and wide body discovered at Phanagoria, a city founded by colonists from Teos on the eastern coast of the [illegible] (Comp.rend. [illegible] de l'Acad. de S. Petersb. [illegible] -

[illegible], p.51). As Rayet has told (p.45), the animals are treated there in an entirely conventional manner, which is not that of Ionian painters. This must be the product of a local workshop, that awkwardly copied oriental fabrics. This lion has almost the air of one of the motives found on Essenian fabrics.

p. 414. Perhaps we was not sufficiently insistent on the prolonged sojourn that the Phoenicians made at Rhodes as at Cyprus. The Phoenicians were established on some point of the shore and doubtless had scarcely penetrated into the interior of the island, which was then covered by thick forests, more remains of which have been preserved by Rhodes than by any other island of the Archipelago. For a certain time, perhaps during one or two centuries, the Phoenicians and Greeks lived side by side in the island, the former retaining their fortified agencies, [illegible] the soil valuable. When the Greeks were constantly recruited by new swarms of immigrants, were sufficiently numerous and strong enough to hold and occupy the country, the Phoenicians

that came from Naucratis (Jour.Hell.Studies. Vol. @@9@. p. 308-353, Pls. 23-26).

P. 406. Within my knowledge, no excavations have been made on the site of Teos, which is very near that of Clazomenes; but a verse of Alceus permits the belief that Teos was one of the centres of the most active fabrication of Ionian ceramics. (Atheneus. XI, p.481,A). He appears to have there an allusion to the game of cottabus. Without stopping to explain it, all that we retain of this fragment is, that in Asian Greece, cups from the workshops of Teos were particularly desired for certain purposes at feasts. On what those cups might be, see Böhlau. Die ionische Augenschalen (Athen-Mitt. 1900, p. 40-99). The author has given for the epigraph of his essay the vase of Alceus just cited. The cups of Chios were also praised. "The cup of Chios," said Hermippos, a comic writer, "hangs on a nail at the top of the wall" in the festal hall. Atheneus,p.480.

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P. 414. Perhaps we was not sufficiently insistent on the prolonged sojourn that the Phoenicians made at Rhodes as at Cyprus. The Phoenicians were established on some point of the shore a and doubtless had scarcely penetrated into the interior of the island, which was then covered by thick forests, more remains of which have been preserved by Rhodes than by any other island of the Archipelago. For a certain time, perhaps during one or two centuries, the Phoenicians and Greeks lived side by side in the island, the former retaining their fortified agencies, the latter building their cities there and gradually making t the soil valuable. When the Greeks were constantly recruited by new swarms of immigrants, were sufficiently numerous and strong enough to hold and occupy the country, the Phoenicians

must give place to them; but as proved by many objects collected in the excavations, they continued to visit the island as merchants, and they brought there the products of their industry in abundance.

Even the Onomastic of the island retains traces of that joint habitation of the two peoples. The highest mountain of Rhodes (5021 ft.) still bears the name of Tairos, derived from the ancient name of Atudirios, Atadeiros. Now this name is identical with the Tabor of Palestine, which Polybius and Stephen of Byzantium also call Atadinos, a word derived from the Semitic r root expressing the idea of height.

The literary texts and inscriptions agree in showing the effect that the Phoenicians established in the island exerted on the Greek colonists. According to Diodorus (V, 58), Cadmus having dedicated a temple to Poseidon, left some Phoenicians to take care of it, and these united in a single community with the Ialysians. The priests of Ialysos carried back their genealogy even to the Semitic founders of the local cult. This a assertion must have been borrowed by Diodorus from a Rhodian historian Ergeias, who appears to have occupied himself much with the antiquities of his native islanda According to him as cited by Atheneus (VIII,p.320), the chief of the first Greek colonists, Iphicles, only obtained possession after a long siege of the fortress, that the Phoenicians had built on the site of Ialysos. What confirms this statement of Diodorus on the relation connecting certain cults of the Greek island with the Phoeniciau cults is an inscription published by Newton (Transctions. XI, part 3, 1878), which treats of a cult of Ialysos, that of the solar goddess Alectrona. This cult seems a remnant of the Phoeniciau cult of Baal. In the ritual preserved for us by this marble, there are certain arrangements that seem of S Semitic origin, for example those excluding from the precinct everything impure, and which prescribe walking only with naked feet. Exodus, III, 5; "Draw thy shoes from thy feet, for the place where you are is holy ground."

P. 414. To Salzmann is due the knowledge of this cemetery of Camiros, which has added to much to the little known until then of the first Ionian art. We believe then that there should be inserted here some statements concerning this person, so much forgotten todan, but whose discoveries made much noise in their

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Salzmann was spoiled by the presents left to him and by the very
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for [illegible] not much resulted. The mine of Camiros was exhausted.
The fragment of a journal of the excavations contained in

time and contributed so much to enrich the museums of London, Paris and Berlin. We owe them to a conversation with M. Fröhner. Salzmann was an Alsatian painter, who went to the Orient to make paintings and photographs there. He began at Jerusalem in 1854 and made a sojourn there from which he sent the first photographs that had been made of the monuments of that city. He then formed a collection that he sold for 1200 francs ($240); then he returned to the Orient and came to Rhodes, where he m married. Settled in the island, he began excavations there on his own account and obtained many beautiful objects, that he took to Paris, and then finally transported to London. The museum of the Louvre had purphased from him a certain number of vases; but it had refused to acquire the polychrome vase of Thetis and Peleus, one of the most curious monuments of Greek ceramic painting. Salzmann asked 4000 francs ($800) for it. N Newton paid 8000 francs ($1600) for it for the British Museum, which ackuired nearly all the rest of the collection of vases, statuettes and jewels.

After having terminated that sale, Salzmann returned to Rhodes to excavate at Camiros and Ialysos on account of the British Museum, and this campaign also procured many interesting monuments for the establishment for which he was agent. One c condition had been imposed on him, that he should keep a journal of the excavations, a labor to which he did not confine h himself in his first undertakings. A copy of this journal was sent to the British Museum, and many extracts from it have been publisned by Furtwängler and Löschke in their Mykenische Vasen. The journal appears to have been carefully kept. M. Fröhner p possessed the original, which is more detailed than the copy sent to Newton. He also holds other papers of Salzmann.

After having fulfilled his mission, Salzmann engaged to excavate anew for the account of M.A.Parent, who desired to employ the fortune acquired by his father, one of the contractors engaged in cutting the isthmus of Suez, to found a museum entirecomposed of objects of known origin, found in systematically conducted excavations; but the ardor of the seeker was lessened. Salzmann was spoiled by the freedom left to him and by the very large sums placed at his disposal. From the excavations made for Parent not much resulted. The mine of Camiros was exhausted. The fragment of a journal of the excavations contained in the

single part that appeared from the museum Parent merits no great confidence. During the last years that he passed in the [illegible] alers in Rhodes, Smyrna and of the Lycian coast. Salzmann returned to settle and die in Alsace about 1874. Some pieces that he kept were left in the hands of his family. These were given after his death to the museum of Colmar (Revue Arch. 1903, p.4...

The only work that Salzmann published has the title:--

A. Salzmann. Necropole de Camiros, ile de Rhodes. Journal des fouilles executees dans cette necropole, pendant les annees 1858 a 1865. Large folio. Detaille.

The title is very pompous; it has not a line of explanatory text, not a word of the journal of the excavations; but the 60 plates composing this album are executed with care. It is a medley of lithographs, lithochromes and of photographs transferred to stone by the Poitevin process, which preceded the invention of photo-typy and heliogravure. The vases not reproduced in this fashion are well drawn by Massias.

Those vases belonging to the Louvre are found in the album, whose publication was commenced by Longperier under the title of Museum of Napoleon III (4 th, Guerin, no date). The images were placed in color on stone by the aid of photographs, by a [illegible] uld not be desired.

Salzmann had associated in his excavations of Camiros a consular agent Biliotti, who until about 1885 continued at Rhodes excavations, whose product he sold in London. From him the museum of Berlin acquired in 1885 an entire collection of Rhodian vases of which Furtwängler gave a summary description in Jahrb. [illegible] ures and on the sources contains indications taken from the memoranda of Biliotti; but these indications are very little.

It is very regrettable, that we possess no connected description and plans of these Rhodian cemeteries, from which came so many interesting pieces. Salzmann, whose labors at Jerusalem had placed in relations with De Saulcy, wrote to him at the time of his first excavations letters that were often communicated to the Academy, and then reproduced in Revue archeologique; but he never had the idea of making a plan of the ground which should fix the relative situation of the different ceme-

single part that appeared from the muesum Parent merits no great confidence. During the last years that he passed in the Orient, Salzmann excavated less than he purchased from the dealers in Rhodes, Smyrna and of the Lycian coast. Salzmann returned to settle and die in Alsace about 1874. Some pieces that he kept were left in the hands of his family. Those were given after his death to the muesum of Colmar (Revue Arch. 1903[2] p.418).

The only work that Salzmann published has the title:--

A. Salzmann. Necropole de Gamiros, ile de Rhodes. Journal des fouilles executees dans cette necropole, pendant les annees 1858 a 1865. Large folio. Detaille.

The title is very pompous; it has not a line of explanatory text, not a word of the journal of the excavations; but the 60 plates composing this album are executed with care. It is a medley of lithographs, lithocromes and of photographs transferred to stone by the Poitevin process, which preceded the invention of phototypy and heliogravure. The vases not reproduced in this fashion are well drawn by Massias.

Those vases belonging to the Louvre are found in the album, whose publication was commenced by Longperier under the title of museum of Napoleon III (4 th, Guerin, no date). The images were placed in color on stone by the aid of photographs, by a very skilful and faithful artist, G.Regamey. Better copies could not be desired.

Salzmann had associated in his excavations of Camiros a consular agent Biliotti, who until about 1865 continued at Rhodes excavations, whose product he sold in London. From him the museum of Berlin acquired in 1885 an entire collection of Rhodian vases of which Furtwängler gave a summary description in Jahrb- of 1886, p.132-156. The statement is enriched by numerous figures and on the sources contains indications taken from the memoranda of Biliotti; but these indications are very little. It is very regrettable, that we possess no connected description and plans of these Rhodian cemeteries, from which came so many interesting pieces. Salzmann, whose labors at Jerusalem had placed in relations with De Saulcy, wrote to him at the time of his first excavations, letters that were often communicated to the Academy, and then reproduced in Revue archaeologique; but he never had the idea of making a plan of the ground which should fix the relative situation of the different ceme-

cemeteries that he exploited. He has nowhere furnished drawings that would give the form of the tombs, and which would indicate the manner in which were arrenged there the objects which he collected there. Nowhere has he marked by what characteristics are distinguished the contents of the different groups of tombs. He could have dispensed with erudition; but the misfortune was, that he had no taste for accuracy. This is how A. Maury describes him, who as director of the Revue archaeologique had been in relations with him; he was a desultory person, a basket with a hole in it, who had gained much money, but had always spent in in advance. In 1878, finding himself at London, A. Maury inquired of Newton when Salzmann died."I don't know," he repield, "he was an odd fellow." He was a strange person.

The excavations made at Rhodes a dozen years since at the c cost of the Carlsberg foundation were very systematically conducted by M.M Blinckenberg and Kinck; but they have so far added nothing to what we possessed and knew of Rhodian ceramics. The Danish explorers devoted themselves to Lindos. They excavated the citadel; they uncovered there the temple of Athena Lindian and gathered a very rich epigraphic booty; but not having opened tombs, they collected no vases.(Brief reports in Bulletion of royal academy of Copenhagen. 1903, 1904, 1905, 1906,1907).

P. 415. In the report on the collection acquired at London for the museum of Berlin, a report cited in the preceding Note, Furtwängler in using indications carried on the memoranda of Biliotti, attests that vases entirely similar have been found in the two groups of tombs exploited in the places, one of which is called Fikelloura and the other Siama. Likewise Böhlau in the catalogue of vases coming from Rhodes given by him. (Aus ionischen und Italischen Nekropolen, p.53-54). It is then entrely chimerical to desire to establish for Rhodian ceramics a classification based on the place where found.

P. 418. On the geometric vases of Rhodes, see the figures c contained in the Article of Dümmler. Jahr.1891. p. 268-269.

P. 431. On the Eginetan origin of the motive of the eyes in the decoration of Ionian vases, see the observations of Furtwängler in Griechische Vasenmalerei. Series I, p.218-219; text.

P. 434. Prinz (Funde aus Naucratis, Pl. III, a) reproduces a plate of the museum of Berlin of unknown origin, whose decoration by its arrangement recalls in a strikiug manner that of

several plates found at Camiros. The internal surface is likewise divided in two segments of unequal size. On the larger of the two is a man on horseback turned to the right. On the smaller segment are radiating stripes.

P. 438. In the small lot of vases contained in the Kircher museum at Rome is a plate that indeed seems Rhodian. Around a central rosette are three covered by marching animals. Same choice of species, refinement in drawing and same attitudes as on the Levy vase. One would say that the two plates came from the same workshop. Like the Levy vase, this plate must have been acquired in Italy.(Paribeni. Vasi inediti del museo Kircheriano, in Mon. ant. Vol. XIV. p.269-308, 14 figs. in text, Pl. XXVI in color).

P. 439. The Louvre was enriched a few years since by a collection of vases formed at Rhodes by M. Arapidis. Besides Corinthian and Attic vases, it contains several entirely Ionian pieces, similar to the best of the Salzmann finds. Only to avoid repetition have we omitted to reproduce a great oenochoe that very much resembles that represented in our Fig. 219. Its surface is likewise divided in bands supperposed from shoulder to foot; but on the Arapidis vase are 5 bands instead of 4. See how they are filled. Band 1, water birds, ducks, Band 2, asses and griffins. Band 3, deer, Band 4, swans. Band 5, buds and f flowers of the lotus. On the foot. The presentation is excellent. All the pieces of the Arapidis are still unpublished. There will be much to use from them.

P. 457. A.G.Reinach. (Apropos de l'himation de Alkimenes de Sybaris, in Revue.Phil. Vol. 35, p. 449) discusses and opposes the conjuecture of Dugas. He shows that Zodia in all examples found to cite, seems to apply only to animated figures, human or animal. The conjecture of Heyne seems to him to lead to fewer objections. In stead of Zousois, it is necessary to read Susiois. The top band would have represented Susians, that of t the bottom Persians. Each of the two series of persons had been represented with its national costume. On certain oriental and Greek monuments, Persians are distinguished from Medes and other people of the empire both by the type of their faces and a difference in costume. If there be difficulty in admitting that these differences were known at Sybaris in Italy, Reinach insists on the close relations that existed between Sybaris and

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ylon or Susa now to hold this difference of appearance. It would be possible that the himation of Alkimenes was embroidered at Miletus and sent to a rich inhabitant of Sybaris.

P. 461. In regard to the divergent rays that decorate the [illegible] on the Greek vase that has a foot. It is no longer purely ornamental there. (Note on the origin of the double rays as an [illegible] 1891.)

P. 471. On the vase of Melos that shows us Apollo escorted by two muses (Fig. 285), a lyre with 7 strings is held in the hand of the god. As already noted, is it then later than the time when the heptachord was substituted as the special Greek instrument and the accompaniment of all lyric poetry for the tetrachord, the old instrument of the epic temple; but this change was already completed from the first half of the 7 th century and it appears difficult to carry back to them the moment when the island ceramics flourished. This vase then does not give us even an approximate date.

P. 515. Prinz (p.122-135) enumerates the sites where were found vases of Ionian make.

P.519, Note 1. I cite as the most complete list that has been given of the hydrias of Caere, that drawn up by Pottier in 1892. Another will be found, richer by two numbers, on p. 1. of the Essay of J. Endt, Beitrage zur Ionischen Vasenmalerei. Prague. 1899. This essay contains interesting observations and several unpublished vases are represented there. What is lacking there are general views.

P. 532. The coiffure of Egyptian kings, with the uraeus on the brow and the flap of cloth falling behind, is more correct- [illegible] the vase of Naucratis, that will be found represented in Jour. Hell. Studies. 1905.p.181, Pl. V, 1.

P. 548, note 1. There were also collected at Eleusis fragme- [illegible] the colors employed and the style of the drawing. Skouzes. [illegible]

Sybaris and Miletus, by the evidence of historians. It was known at Miletus by all Ionians that had made the journey to Babylon or Susa how to hold this difference of appearance. It would be possible that the himation of Alkimenes was embroidered at Miletus and sent to a rich inhabitant of Sybaris.

P. 461. In regard to the divergent rays that decorate the f foot of so many Ionian vases, Karo considers this motive as b borrowed from Egypt. It was suggested to the Greek potter by those Egyptian vases without feet that were thought to come f from the lotus flower. The motive loses this primitive meaning on the Greek vase that has a foot. It is no longer purely ornamental there. (Note on the origin of the double rays as an ornament, in Jour.Hell.Studies. 1899, p. 163).

P. 471. On the vase of Melos that shows us Apollo escorted by two muses (Fig. 235), a lyre with 7 strings is held in the hand of the god. As already noted, is it then later than the time when the reptachord was substituted as the special Greek instrument and the accompaniament of all lyric poetry for the tetrachord, the old instrument of the epic temple; but this change was already completed from the first half of the 7 th century and it appears difficult to carry back to then the moment when the island ceramics flourished. This vase then does not give us even an approximate date.

P. 515. Prinz (p.122-135) enumerates the sites where were f found vases of Ionian make.

P.518, Note 1. I cite as the most complete list that has been given of the hydrias of Gaere, that drawn up by Pottier in 1892. Another will be found, richer by two numbers, on p. 1. of the Essay of J. Endt, Beitrage zur Ionischen Vasenmalerei. Prague. 1899. This essay contains interesting observations and several unpublished vases are represented there. What is lacking there are general views.

P. 522. The coiffure of Egyptian kings, with the uraeus on the brow and the flap of cloth falling behind, is more correctly represented only on the vase of Busiris on a fragment of t the vase of Naucratis, that will be found represented in Jour. Hell.Studies. 1905.p.121, Pl. V, 1.

P. 543, note 1. There were also collected at Eleusis fragments of vases on which the figures recall the cup of Phineus by the colors employed and the style of the drawing. Rhomaios. V

Vasenscherben iu Eleusis (Athen.Mitt.1906.p.186-204,Pl. XIVV).

P.551. On the vases that were fabricated in Italy by Ionian painters established in that country, see the observations and conjectures of Furtwängler. Griechischische Vasenmalerei. Series I. Notes and pl. 21.

P. 558. Lines 12-14. The stater of electrum mentioned there made a part of the Jameson collection. We reproduce it at double the actual size, as the ornament on the title of this volume.

P. 658. In the fragments of vases gathered at Empurias on the eastern coast of Spain, where Massalia had founded a colony of Emporion, there has been found no trace of Ionian pottery; but there have been collected fragments of Corinthian and Attic v vases with black and red figures. Institut d'estudios catalanas. 1908. p.150-240. Les excavations d'Empurias, p. 195-240. A. Frickenhaus. Griechische Vasen aus Emporion.

On the places where fragments of Corinthian vases have been collected, see H. Prinz, p. 74. They have been found as far E East as Gordion in Phrygia.

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